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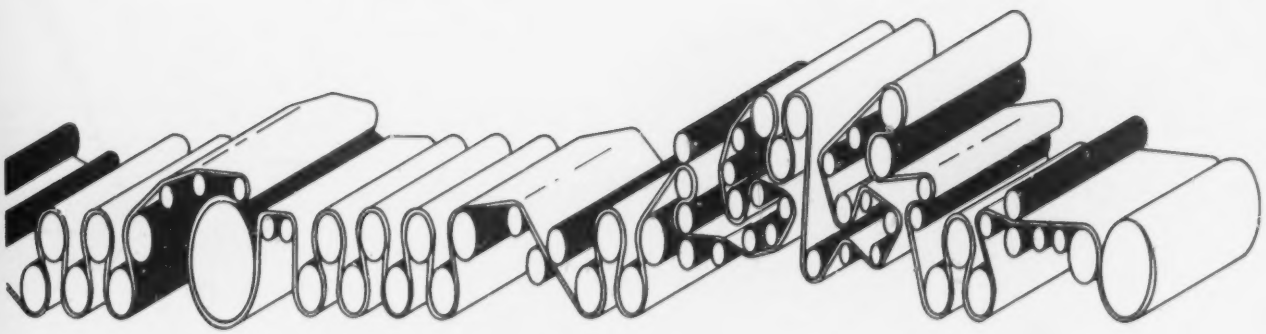
1990 Statistics of Paper Paperboard & Wood Pulp

Data through 1989



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F O R E W O R D

The American Paper Institute is pleased to present the twenty-eighth edition of its **Statistics of Paper, Paperboard and Wood Pulp.**

This report presents a comprehensive up-to-date statistical base of annual data on the Paper, Paperboard and Wood Pulp industries, together with additional information on the entire Paper and Allied Products Industry Group.

Data on paper, paperboard and wood pulp production, imports, exports, consumption, capacity and price indexes, by major grade, are supplemented by tables showing fibrous materials consumption, industry patterns of employment and wage rates, energy consumption, and financial trends. Also included is an analysis of the demand for paper and paperboard, by major grade, based on the real gross national product.

The tables are grouped into four functional sections: production and related data; regional data; input trends and financial information. Supplemental tables show production, imports, exports and new supply of wet machine board and construction paper and paperboard, the import and export trends used to calculate paper and paperboard new supply presented in Table VIII, along with an index to this report.

Tabular information in this report is supplemented by various graphs indicating changes in the growth and structure of the paper, paperboard and wood pulp industries.

Comments or suggestions for improvement of this report are welcomed, and should be directed to Dr. Benjamin Slatin, who is responsible for its preparation.

August 1990

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SECTION I

PRODUCTION AND RELATED DATA

Highlights of 1989

Paper and paperboard production in 1989 held near its 1988 record-high level, edging up to 76,701,000 tons (See Table IA). A 0.1 percent loss in paper production was offset by a 0.9 percent gain in paperboard.

The various paper grades followed diverse trends, reflecting the specific conditions affecting each sector (Table II). Newsprint production in 1989, for example, increased as new capacity came on-stream during the course of the year. The white paper grades were affected by changes in user inventories: a build-up of inventories in 1988 brought production above consumption levels, followed by inventory curtailment in 1989, resulting in a 1.2% decline in shipments. Tissue paper production grew 3%, reflecting rising consumer demand. Packaging and industrial converting paper output declined.

While paperboard demand also lagged its historical market trends, suggesting tight inventory controls by end-users, production of both containerboard and boxboard for domestic use registered small gains. The containerboard increase of 0.8% compares with a 1.6% rise in shipments of fiber boxes. Manufacture of non-durable goods -- which include the major markets for both containerboard and boxboard products -- advanced 4.5%. Paperboard production for export expanded by 3%, accounting for about one-fourth of the total production increase.

International trade generally supported U.S. paper, paperboard and wood pulp output. Exports of paper, paperboard and products moved 11% above their 1988 high in 1989 (Table XII). Imports of most grades showed little change from their 1988 levels (Table XI).

The graphs included in this section depict some of the major structural changes in paper, paperboard and wood pulp industries.

Tables

The tables in this section present detailed data on production, imports, exports, new supply, capacity and value of shipments of paper and paperboard products, together with analyses of demand for paper and paperboard, by major grade, relative to real GNP. A table on wood pulp capacity is also included.

The 1989 import and export data are not fully comparable with those shown for earlier years because of the shift to the international Harmonized Commodity Description and Coding System that Commerce introduced in the U.S. imports and exports statistics in January 1989. For some years now the Commerce's data on paper and paperboard exports had not fully captured all the exports to Canada. Data from the Canadian Pulp and Paper Association indicate that exports of waste paper to Canada in 1989 were some 300,000 tons higher than reported by the U.S. Bureau of the Census.

TABLE 1

PAPER AND PAPERBOARD

(Includes Wet Machine Board and Construction Grades)

PRODUCTION, IMPORTS, EXPORTS AND NEW SUPPLY

1899 - 1989

YEAR	PRODUCTION	IMPORTS (Incl. Products)	EXPORTS	NEW SUPPLY*	POPULATION	PER CAPITA NEW SUPPLY	GROSS NATIONAL PRODUCT $ Bil. 1982 Prices	NEW SUPPLY TO REAL GNP 000 Tons Per $ Billion
	---------(Thousand Short tons)----------			----------	Millions	---lbs.---		
1899	2,168	--	--	2,168	74.9	57.9	--	--
1919	5,966	708	421	6,253	105.1	119.0	--	--
1929	11,140	2,534	262	13,412	121.8	220.2	709.6	18.90
1934	9,187	2,265	163	11,289	126.5	178.5	536.7	21.03
1939	13,510	2,687	249	15,948	131.0	243.5	716.6	22.26
1944	17,183	2,576	314	19,445	138.9	280.0	1,330.6	14.61
1949	20,098	4,752	367	24,483	149.7	327.1	1,109.0	22.08
1954	26,411	5,165	682	30,894	163.0	379.1	1,416.2	21.81
1959	33,748	5,517	906	38,359	177.8	431.4	1,629.1	23.55
1964	40,962	6,209	1,694	45,477	191.9	474.0	1,973.3	23.05
1965	43,455	6,585	1,770	48,270	194.3	496.9	2,087.6	23.12
1966	46,702	7,358	1,942	52,118	196.6	530.2	2,208.3	23.60
1967	46,568	6,952	2,085	51,435	198.7	517.7	2,271.4	22.64
1968	50,134	6,842	2,625	54,351	200.7	541.6	2,365.6	22.98
1969	52,914	7,258	2,749	57,423	202.7	566.6	2,423.3	23.70
1970	51,670	7,115	2,817	55,968	205.1	545.8	2,416.7	23.16
1971	53,162	7,406	3,118	57,450	207.7	553.2	2,484.8	23.12
1972	57,433	7,676	3,069	62,040	209.9	591.1	2,608.5	23.78
1973	59,900	8,131	3,027	65,004	211.9	613.5	2,744.1	23.69
1974	59,040	8,065	3,797	63,308	213.9	591.9	2,729.3	23.20
1975	50,976	6,253	3,116	54,113	216.0	501.0	2,695.0	20.08
1976	58,329	7,142	3,456	62,015	218.0	568.9	2,826.7	21.94
1977	60,040	7,432	3,230	64,242	220.2	583.4	2,958.6	21.71
1978	62,047	9,113	3,373	67,787	222.6	609.0	3,115.2	21.76
1979	64,345	9,123	3,672	69,796	225.1	620.1	3,192.3	21.86
1980	63,600	8,780	5,214	67,166	227.8	589.7	3,187.2	21.07
1981	64,259	8,339	4,641	67,957	230.1	590.7	3,248.7	20.92
1982 R**	60,951	8,024	4,246	64,729	232.5	556.8	3,166.0	20.45
1983 R**	66,748	8,986	4,569	71,165	234.8	606.2	3,279.1	21.70
1984 R**	70,248	11,075	4,387	76,936	237.0	649.2	3,501.4	21.97
1985 R**	68,688	11,522	4,071	76,139	239.3	636.3	3,618.7	21.04
1986 R**	72,505	11,936	4,687	79,754	241.6	660.2	3,717.9	21.45
1987 R**	75,958	12,837	5,304	83,491	243.9	684.6	3,845.3	21.71
1988 R**	78,025	13,110	5,691	85,444	246.3	693.8	4,016.9	21.27
1989 P**	78,274	13,100	6,300	85,074	248.8	683.9	4,117.7	20.66

SOURCE: Production 1899-1958 - Department of Commerce, Bureau of Census R - Revised P - Preliminary
Production - 1959-1989 - American Paper Institute. Imports and Exports - Department of Commerce, Bureau of Census
Population - Department of Commerce, Bureau of Census. Real Gross National Product - Department of Commerce, B. E. A.
All calculations by American Paper Institute

NOTE: Production, Imports and Exports 1899-1944 include Hard Pressed Board
Population data include Armed Forces overseas

* New Supply = Production plus Imports less Exports; includes imports and exports of products

** Includes API estimate for construction and wet machine board grades: 1982 - 1,662,000 tons; 1983-1984 - 1,800,000 tons; 1985 - 1,700,000 tons; 1986 - 1,600,000 tons; 1987 - 1,590,000 tons 1988 - 1,570,000 tons; 1989 1,570,000 tons

Chart 1

PAPER AND PAPERBOARD

(Including Wet Machine Board & Construction Grades)

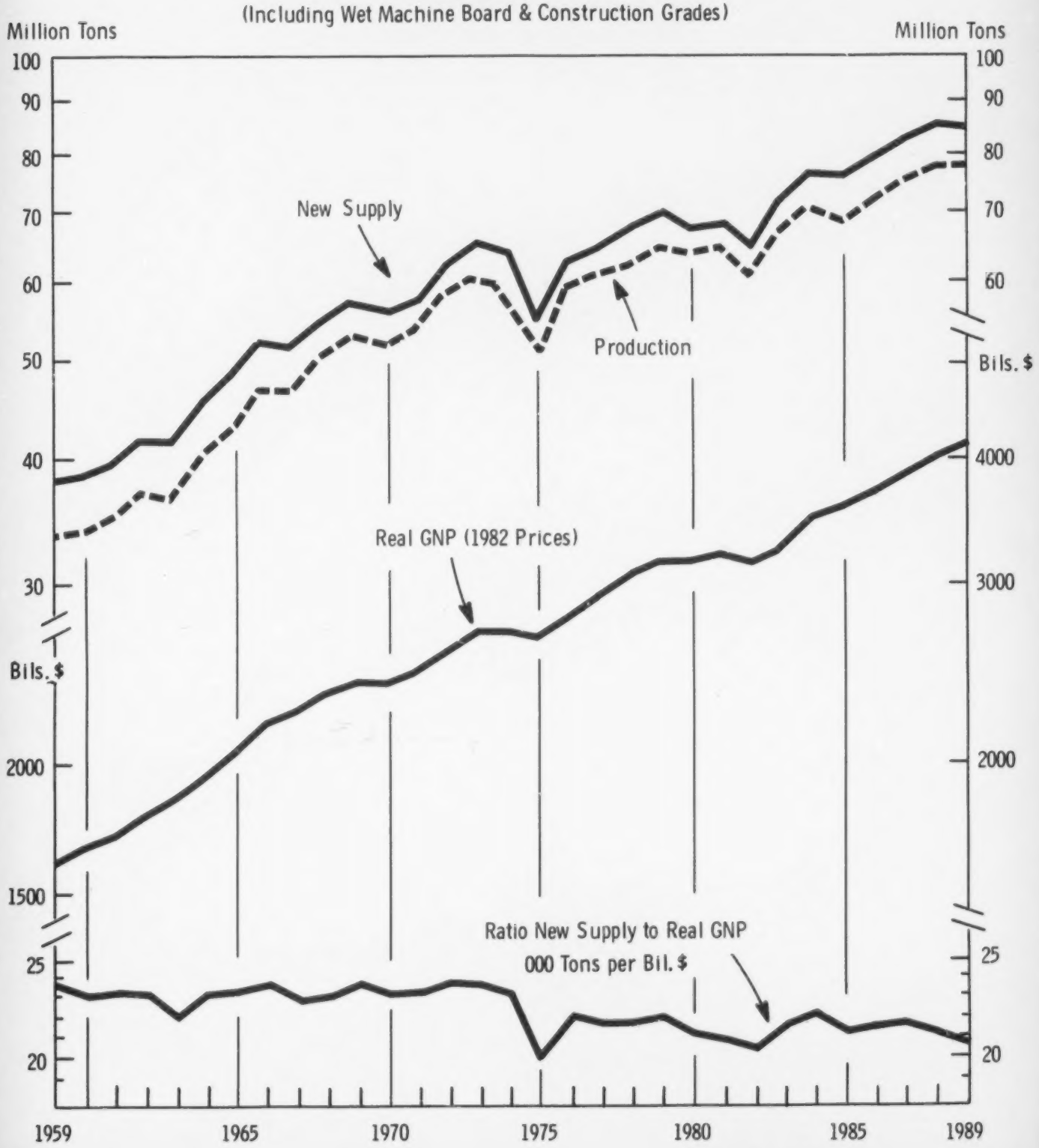

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TABLE 1A

PAPER AND PAPERBOARD

PRODUCTION, IMPORTS, EXPORTS AND NEW SUPPLY

1959 - 1989

YEAR		PRODUCTION	IMPORTS (Incl. Products)	EXPORTS	NEW SUPPLY*	REAL GROSS NATIONAL PRODUCT $ Billion 1982 Prices	RATIO TO NEW SUPPLY TO REAL GNP 000 Tons Per $ Billion	POPULATION Millions	PER CAPITA NEW SUPPLY ---lbs.---
		---------(Thousand Short tons)--------			----------				
1959		30,997	5,484	874	35,607	1,629.1	21.86	177.8	400.5
1960		31,221	5,611	990	35,842	1,665.3	21.52	180.7	396.7
1961		32,548	5,663	1,174	37,037	1,708.7	21.68	183.7	403.2
1962		34,407	5,719	1,154	38,972	1,799.4	21.66	186.5	417.9
1963		35,914	5,637	1,302	40,249	1,873.3	21.49	189.2	425.5
1964		38,066	6,154	1,660	42,560	1,973.3	21.57	191.9	443.6
1965		40,489	6,545	1,737	45,297	2,087.6	21.70	194.3	466.3
1966		43,904	7,327	1,904	49,327	2,208.3	22.34	196.6	501.8
1967		43,745	6,917	2,054	48,608	2,271.4	21.40	198.7	489.3
1968		47,071	6,793	2,587	51,277	2,365.6	21.68	200.7	511.0
1969		49,810	7,209	2,703	54,316	2,423.3	22.41	202.7	535.9
1970		48,719	7,057	2,779	52,997	2,416.7	21.93	205.1	516.8
1971		49,742	7,319	3,076	53,985	2,484.8	21.73	207.7	519.8
1972		53,842	7,567	3,020	58,389	2,608.5	22.38	209.9	556.4
1973		56,346	8,019	2,966	61,399	2,744.1	22.37	211.9	579.5
1974		55,756	7,970	3,720	60,006	2,729.3	21.99	213.9	561.1
1975		47,997	6,164	3,050	51,111	2,695.0	18.96	216.0	473.2
1976		54,993	7,042	3,388	58,647	2,826.7	20.75	218.0	538.0
1977		56,656	7,294	3,171	60,779	2,958.6	20.54	220.2	551.9
1978		58,571	8,781	3,301	64,051	3,115.2	20.56	222.6	575.5
1979		61,071	8,738	3,610	66,199	3,192.4	20.74	225.1	588.2
1980		61,042	8,304	5,148	64,198	3,187.1	20.14	227.8	563.6
1981		62,109	7,941	4,561	65,489	3,248.7	20.16	230.1	569.2
1982	R	59,289	7,603	4,187	62,705	3,166.0	19.81	232.5	539.4
1983	R	64,948	8,509	4,502	68,955	3,279.1	21.03	234.8	587.4
1984	R	68,448	10,576	4,310	74,714	3,501.4	21.34	237.0	630.5
1985	R	66,988	11,105	4,003	74,090	3,618.7	20.47	239.3	619.2
1986	R	70,905	11,597	4,593	77,909	3,717.9	20.96	241.6	644.9
1987	R	74,368	12,528	5,197	81,699	3,845.3	21.25	243.9	669.9
1988	R	76,455	12,788	5,559	83,683	4,016.9	20.83	247.4	676.5
1989	P	76,704	12,910	6,264	83,350	4,117.7	20.24	249.9	667.1

SOURCE: See Table I

NOTE: All data exclude wet machine board, building paper and insulating board

* New Supply = Production plus Imports less Exports

R = Revised P = Preliminary

Chart 2

PAPER AND PAPERBOARD

(Excluding Wet Machine Board & Construction Grades)

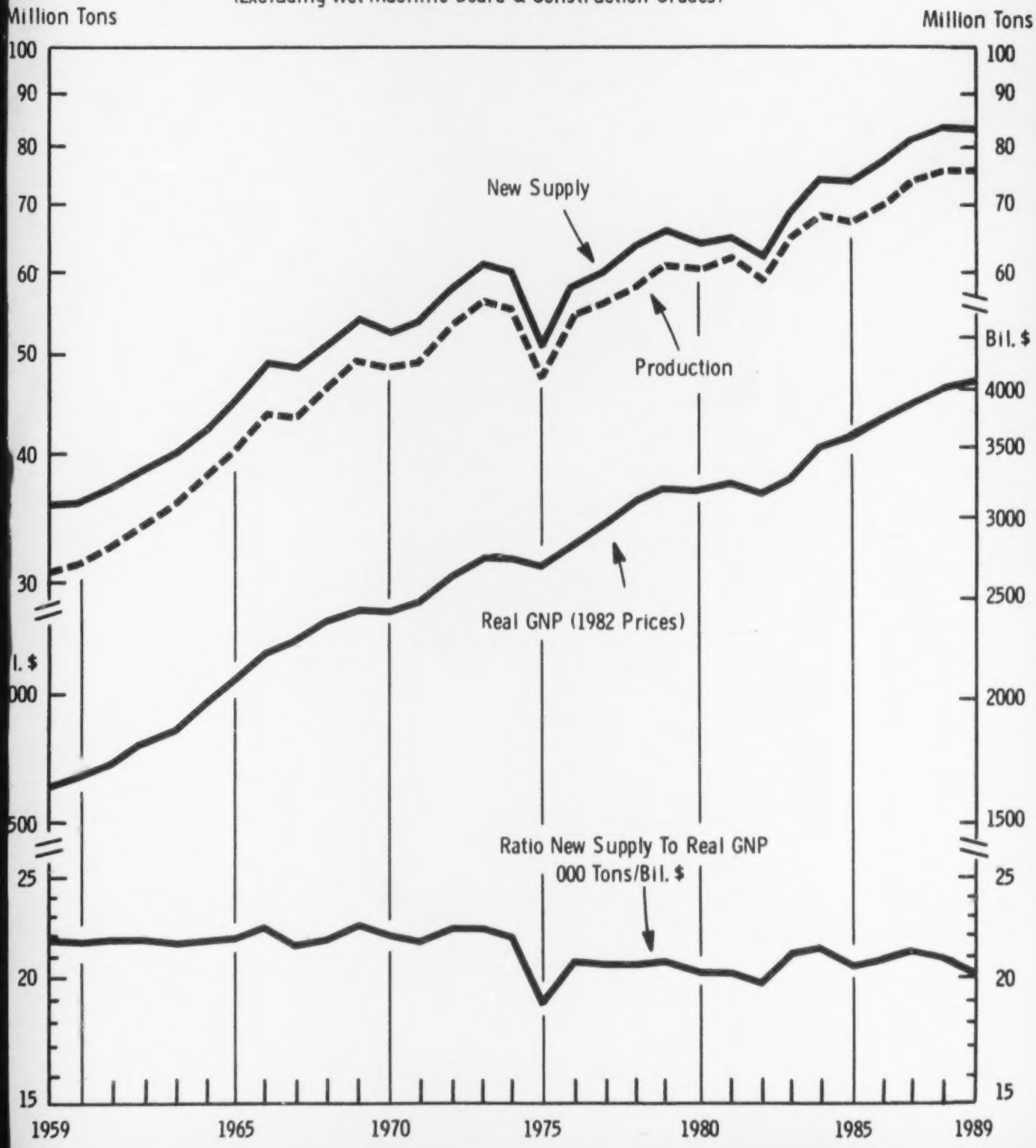

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Chart 3

UNITED STATES PAPER PRODUCTION

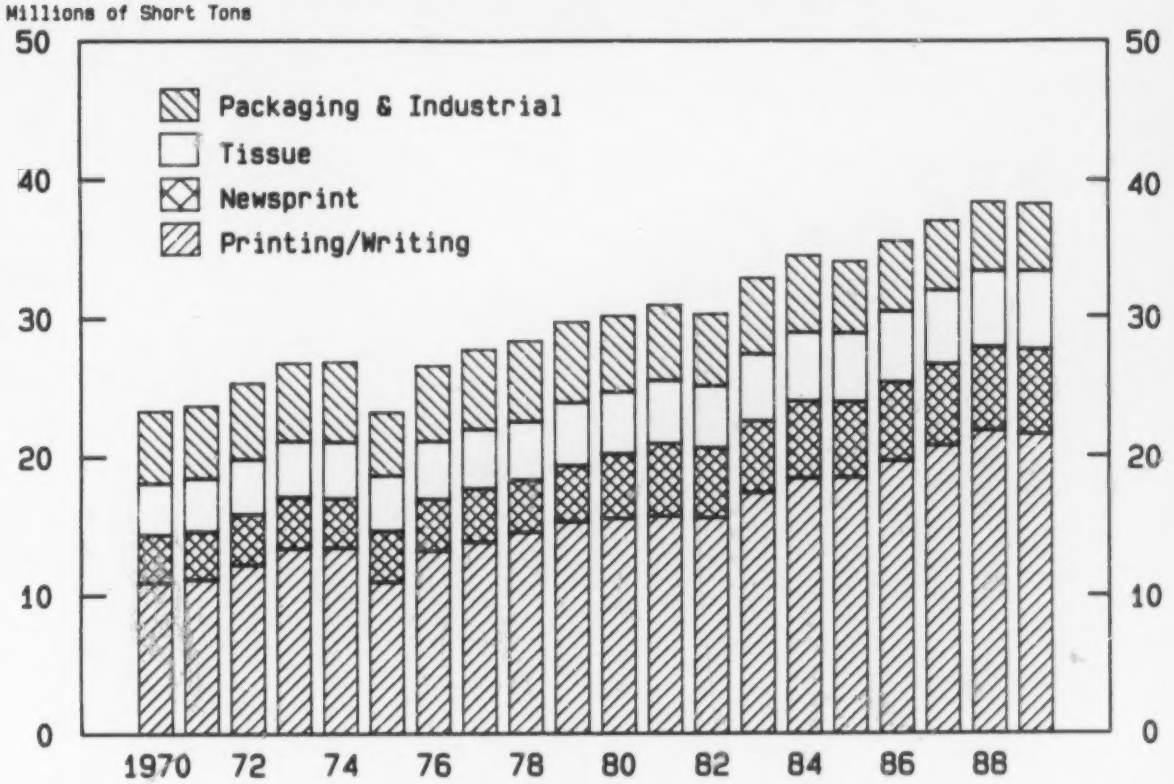


Chart 4

UNITED STATES PAPERBOARD PRODUCTION

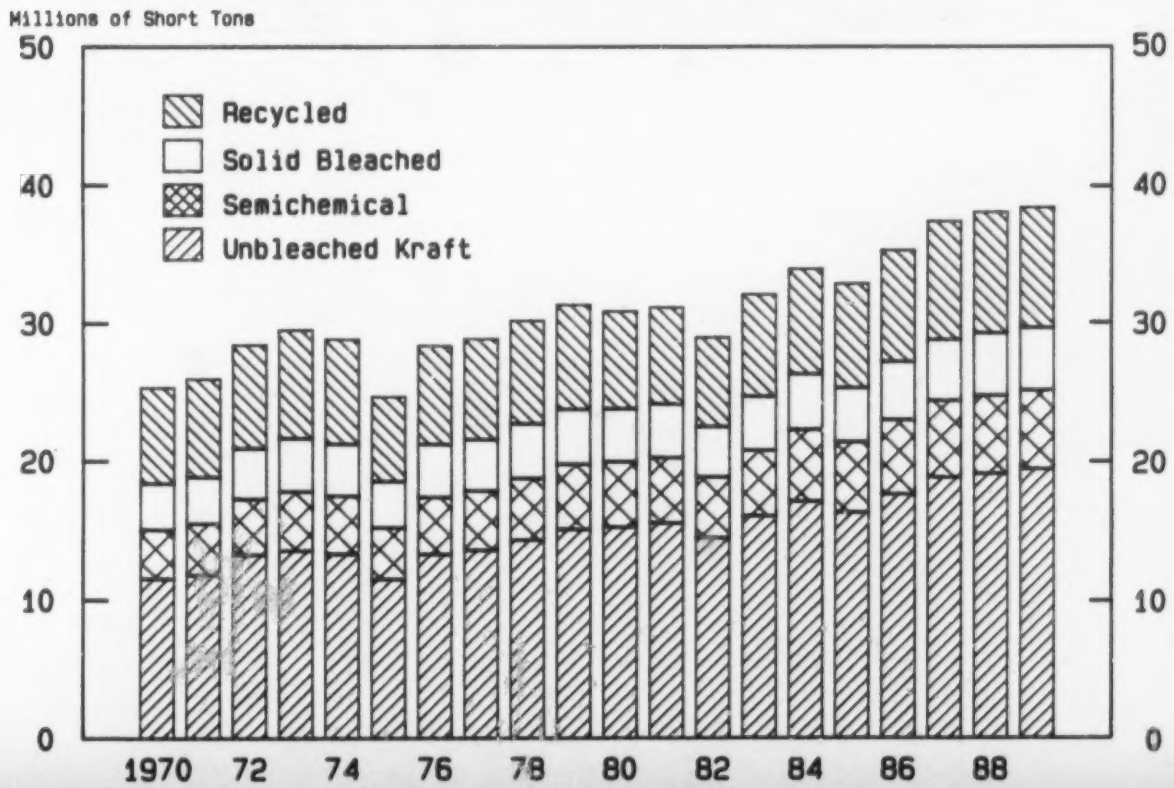


Chart 5

CHANGES IN THE STRUCTURE OF THE PAPER INDUSTRY

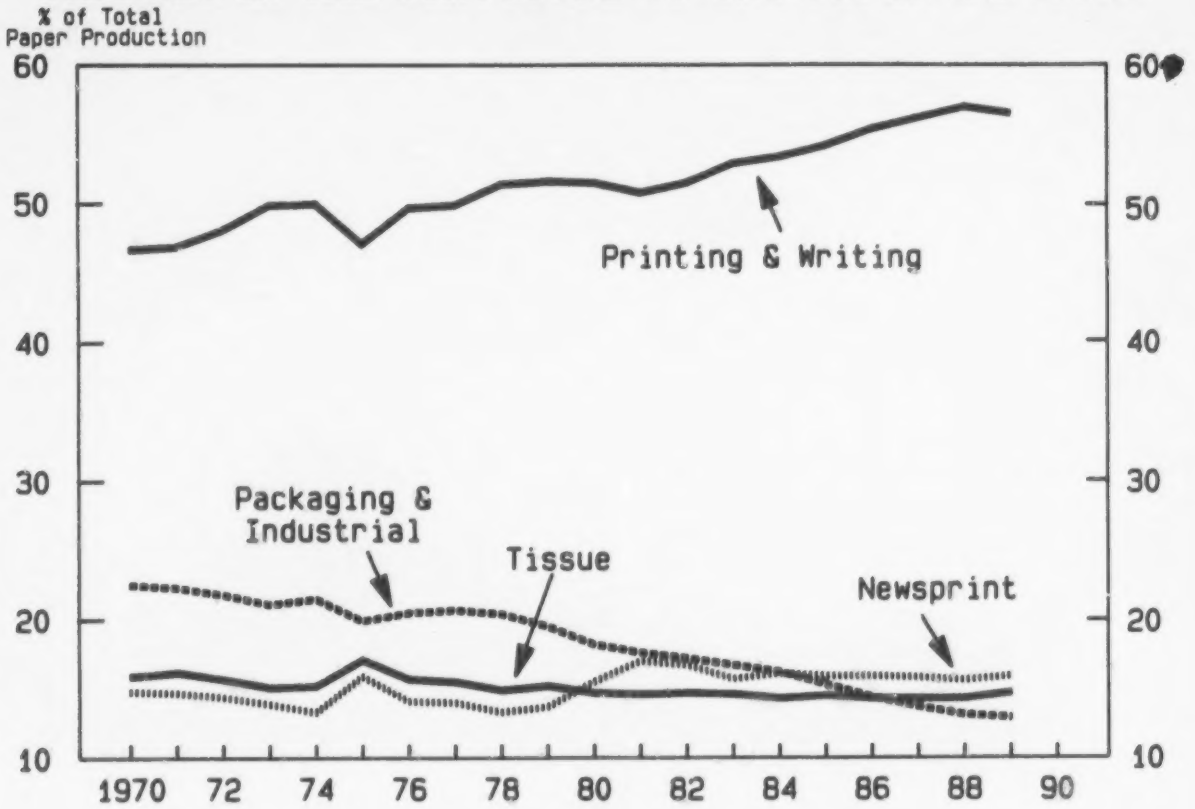


Chart 6

PERCENT OF U.S. NEWSPRINT CONSUMPTION PRODUCED IN U.S. AND CANADA

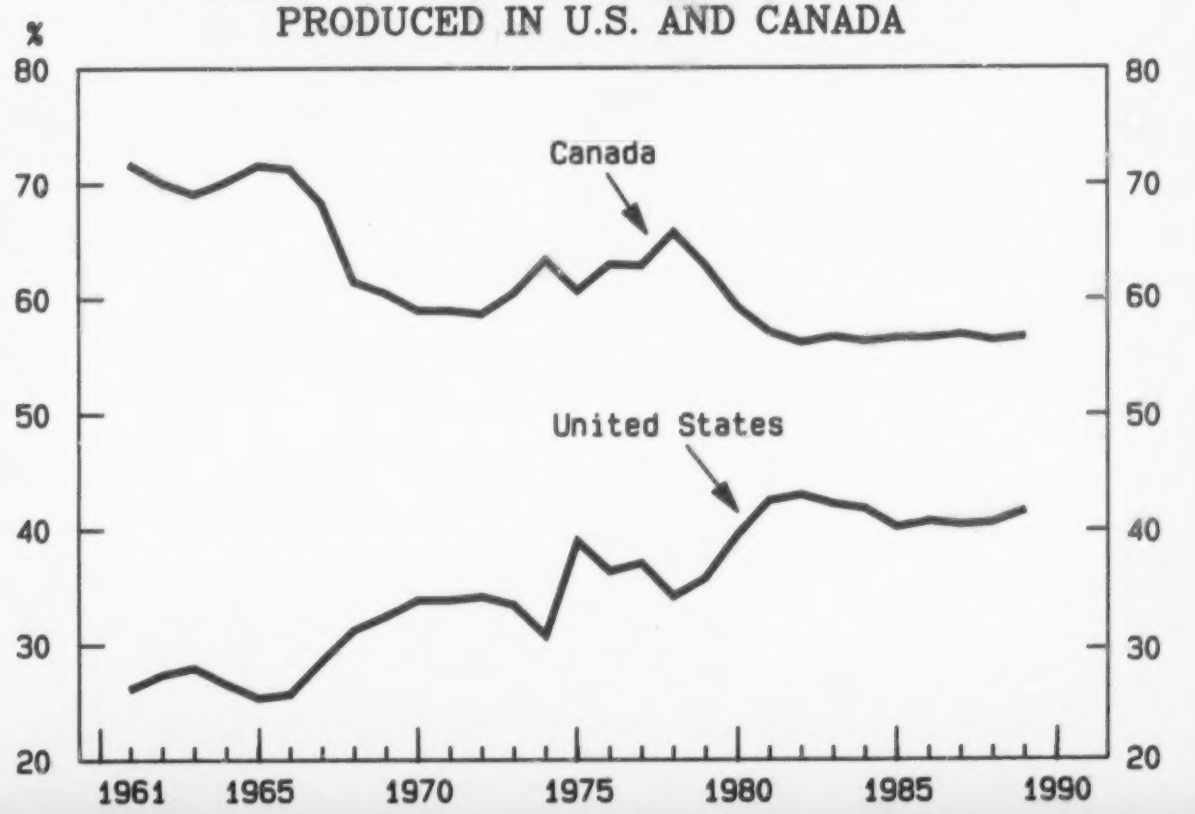


TABLE II

TOTAL PAPER SHIPMENTS

1962 – 1989

(Thousands of Tons)

	1962	1963	1964	1965	1966	1967	1968	
TOTAL PAPER, ALL GRADES	16,560.4	17,319.4	18,111.7	19,157.0	20,724.9	20,925.6	22,181.1	RS
Newsprint Production	2,153.9	2,218.0	2,261.0	2,245.0	2,483.0	2,709.0	3,045.0	
Total Printing–Writing Papers	7,803.7	8,183.5	8,667.9	9,337.5	10,318.4	10,121.9	10,481.5	
Uncoated Groundwood	909.7	956.4	995.4	974.0	1,088.3	1,019.6	1,090.3	
Publishing and Printing	755.0	806.7	837.2	814.0	876.4	806.4	883.3	
Converting	154.7	149.7	158.2	160.0	211.9	213.2	207.0	
Coated Papers	2,290.5	2,425.2	2,608.3	2,814.2	3,087.6	3,086.4	3,100.5	RS
Uncoated Free Sheet Papers	3,458.3	3,634.1	3,847.5	4,216.0	4,691.9	4,577.0	4,787.7	
Bond and Writing	457.3	470.0	499.2	555.9	620.8	613.9	627.1	
Form Bond	345.0	375.0	420.0	490.0	575.0	600.0	570.9	
Ledger	45.9	45.1	43.0	46.6	49.1	47.5	54.6	
Mimeograph	113.3	110.9	116.5	117.3	125.4	122.7	134.9	
Duplicating	111.5	116.0	117.3	125.6	134.9	141.9	160.9	
Manifold	22.9	17.4	15.5	19.9	20.2	17.2	14.0	
Papeterie and Wedding	49.3	42.9	45.2	45.5	51.7	51.7	56.0	
Carbonless	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	50.0	
Opaque Circular	26.5	27.3	20.6	22.9	23.8	24.6	23.3	
Other	229.8	247.6	261.0	302.2	330.3	344.7	N.A.	
Cover and Text Papers	153.8	155.4	168.1	186.0	194.1	192.2	192.8	
M.F., E.F. & Super Calendered	274.2	264.1	240.1	219.3	228.2	209.9	198.2	
Offset	765.1	862.3	948.5	1,062.4	1,221.9	1,165.3	1,295.4	
White Wove Envelope	310.6	318.8	357.3	392.4	412.8	423.0	459.6	
Tablet	250.3	281.5	293.7	304.4	346.3	294.6	313.0	
Kraft Envelope Papers: Total	175.3	175.2	172.0	194.0	203.7	188.5	186.6	
Brown Kraft – Estimated	85.0	85.0	80.0	67.0	E 68.1	E 92.9	E 91.4	E
Bleached Kraft – Estimated	90.3	90.2	92.0	127.0	E 135.6	E 95.6	E 95.2	E
Other	127.5	124.6	129.5	131.6	153.7	139.3	450.4	
Thin Papers	183.7	178.7	192.7	211.3	245.4	238.0	261.6	
Cotton Fiber Papers	118.0	118.8	117.8	122.3	126.3	124.8	124.0	
Bond and Writing	68.8	70.8	72.1	74.8	78.7	74.8	80.5	
Other Business	30.5	29.7	28.0	29.0	28.8	30.1	25.2	
Technical and Other	18.7	18.3	17.7	18.5	18.8	19.9	18.3	
Bleached Bristols	843.5	870.3	906.2	999.7	1,078.9	1,076.1	1,117.4	
Tabulating Index	393.7	395.5	419.4	478.6	511.4	533.2	534.6	
Tag	154.6	164.7	171.5	194.9	196.9	187.4	203.7	
File Folder	51.2	58.9	59.6	64.0	71.4	71.0	77.8	
Index Bristol	97.6	98.0	97.4	100.6	115.0	105.5	104.4	
Printing Bristol	22.3	22.3	22.4	23.4	26.5	24.6	24.0	
Postcard	18.6	13.7	10.4	8.8	10.3	8.5	5.2	
Coated Bristol	105.5	117.2	125.5	129.4	144.4	145.9	167.7	
Total Packaging and Industrial Papers	4,188.6	4,341.6	4,436.1	4,683.9	4,823.7	4,865.7	5,198.8	
Kraft, Glassine, Greaseproof & Veg. Parchment	3,880.6	4,027.2	4,091.7	4,319.1	4,430.1	4,479.2	4,753.0	
Unbleached Kraft Papers	2,890.9	3,051.4	3,098.4	3,293.1	3,414.4	3,391.9	3,602.5	
Wrapping	339.2	354.6	352.2	358.9	370.0	334.7	353.5	
Bag and Sack (Exc. Shipping Sack)	1,231.0	1,270.2	1,326.2	1,447.7	1,548.1	1,631.3	1,713.0	
Shipping Sack	797.8	880.7	865.9	894.9	884.7	902.5	978.8	
Other Converting	522.9	545.9	554.1	591.6	611.6	523.4	557.2	
Bleached Packaging Papers (Census)	799.0	782.0	797.4	825.4	801.1	891.2	942.8	
Wrapping	204.3	191.4	191.7	207.4	208.4	217.7	210.5	
Bag and Sack (Exc. Shipping Sack)	134.5	130.4	138.5	163.1	171.6	185.5	207.8	
Shipping Sack	59.8	67.0	75.2	72.0	73.7	89.1	88.7	
Other Converting 1/	400.4	393.2	392.0	382.9	347.4	398.9	435.8	
Glassine, Grsprf. and Veg. Parch. (Census)	190.7	193.8	195.9	200.6	214.8	196.1	207.7	
Special Industrial Papers (Census)	308.0	314.4	344.4	364.8	393.6	386.5	445.8	
Total Tissue Papers (Census)	2,414.2	2,576.3	2,746.7	2,890.6	C 3,099.8	C 3,229.0	3,455.8	
Total Sanitary Tissue Stock	2,178.9	2,340.3	2,515.7	2,651.4	2,847.5	2,976.9	3,217.1	
Toilet Tissue	985.4	1,054.6	1,107.2	1,120.9	1,169.9	1,171.0	1,273.1	
Facial Tissue Stock	261.8	278.4	327.4	327.2	337.5	349.1	349.8	
Napkin Stock	249.5	261.3	266.1	287.3	332.8	347.3	374.7	
Towelling*	604.5	662.9	723.1	816.4	897.7	987.8	1,077.7	
Wiper Stock*	31.9	33.1	38.4	40.1	49.1	48.9	50.3	
Other Sanitary Tissue*	45.8	50.0	53.5	59.5	60.5	72.8	91.5	
Total All Other Tissue	235.3	236.0	231.0	239.2	252.3	252.1	238.7	

NOTE (Census): Current Industrial Reports, Pulp, Paper and Board 1/Exc. Bleached Kraft Envelope Paper * Revised slighly by API C–Bureau of the Census data

TABLE II (Cont.)
TOTAL PAPER SHIPMENTS
1962 – 1989
(Thousands of Tons)

	1969	1970	1971	1972	1973	1974		1975
TOTAL PAPER, ALL GRADES	23,448.7	23,351.2	23,722.2	25,358.5	26,797.3	26,862.7		23,260.3
Newsprint Production	3,362.0	3,464.0	3,476.0	3,656.0	3,738.0	3,561.0	#	3,691.0
Total Printing–Writing Papers	11,139.1	10,903.9	11,132.1	12,194.5	13,371.2	13,431.4		10,965.6
Uncoated Groundwood	1,094.9	1,084.6	1,089.2	1,126.0	1,180.9	1,192.4		1,127.2
Publishing and Printing	914.0	924.4	929.0	950.9	985.1	1,001.8		947.5
Converting	180.9	160.2	160.2	175.1	195.8	190.6		179.7
Coated Papers	3,306.4	3,239.2	3,191.9	3,483.2	3,779.1	3,775.8		3,155.4
Uncoated Free Sheet Papers	5,182.9	5,090.4	5,350.9	5,953.2	6,673.6	6,755.3		5,328.3
Bond and Writing	718.0	698.6	781.5	889.6	1,075.0	1,332.6		1,017.3
Form Bond	688.7	722.1	787.1	913.0	1,119.9	1,161.5		950.1
Ledger	51.1	48.2	51.5	53.9	62.0	71.0		51.2
Mimeograph	132.6	126.4	125.5	128.2	143.3	128.8		96.2
Duplicating	172.5	165.6	162.9	171.4	182.4	178.4		123.6
Manifold	11.0	9.8	10.7	11.8	12.7	11.7		9.0
Papeterie and Wedding	59.9	53.9	51.9	51.1	57.3	47.3		34.2
Carbonless	85.0	80.0	90.0	105.0	120.0	160.0		140.0
Opaque Circular	25.0	23.6	24.5	26.2	33.6	38.1		26.6
Cover and Text Papers	200.1	193.2	181.0	194.4	219.5	213.1		156.2
M.F., E.F. & Super Calendered	214.3	162.1	147.6	128.6	154.6	128.1		86.5
Offset	1,381.5	1,384.0	1,467.9	1,688.0	1,862.5	1,838.7		1,462.5
White Wove Envelope	461.2	466.1	467.6	527.0	570.9	530.6		456.6
Tablet	320.9	342.4	401.3	396.5	305.5	167.5		229.3
Kraft Envelope Papers: Total	208.8	189.6	176.9	189.5	214.0	203.1		163.8
Brown Kraft – Estimated	102.9	95.7	93.7	93.2	106.7	98.3		83.4
Bleached Kraft – Estimated	105.9	93.9	83.2	96.3	107.3	104.8		80.4
Other	472.3	424.8	443.0	479.0	540.4	544.8		345.2
Thin Papers	289.0	287.9	292.3	333.2	358.2	371.8		310.8
Cotton Fiber Papers	128.1	115.4	112.8	119.1	123.7	117.0		94.5
Bond and Writing	85.3	76.5	75.7	81.1	85.5	82.2		67.6
Other Business	24.7	23.4	21.1	22.2	22.8	20.8		16.3
Technical and Other	18.1	15.5	16.0	15.8	15.4	14.0		10.6
Bleached Bristols	1,137.8	1,086.4	1,095.0	1,179.8	1,255.7	1,219.1		949.4
Tabulating Index	558.7	499.6	458.3	465.0	491.2	498.6		372.7
Tag	193.5	184.3	193.5	217.1	220.3	140.1		132.3
File Folder	76.5	72.0	80.9	88.3	87.1	86.9		86.0
Index Bristol	100.4	102.3	106.1	120.9	130.9	181.0		119.0
Printing Bristol	28.4	32.0	32.9	39.2	46.9	52.5		37.9
Postcard	5.8	6.7	6.7	5.7	3.1	0.2		1.3
Coated Bristol	173.5	189.5	216.6	243.6	276.2	279.8		200.2
Total Packaging and Industrial Papers	5,336.7	5,264.8	5,281.4	5,531.3	5,849.3	5,783.9		4,624 1
Kraft, Glassine, Greaseproof & Veg. Parchment	4,861.7	4,809.7	4,807.1	4,986.5	4,999.2	5,132.6		4,138.4
Unbleached Kraft Papers	3,670.2	3,672.4	3,649.2	3,810.9	3,901.6	4,033.5	RS	3,253.7
Wrapping	327.7	296.4	280.3	282.5	272.3	175.3	RS	139.1
Bag and Sack (Exc. Shipping Sack)	1,797.9	1,927.4	1,929.3	2,014.5	2,006.2	2,130.5	RS	1,924.6
Shipping Sack	983.5	953.3	930.4	935.7	1,025.8	1,187.2	RS	838.4
Other Converting	561.1	495.3	509.2	578.2	597.3	540.5	RS	351.6
Bleached Packaging Papers (Census)	975.1	934.0	952.1	941.6	867.1	858.6		693.5
Wrapping	229.3	219.6	205.7	204.0	158.1	143.1		115.3
Bag and Sack (Exc. Shipping Sack)	227.3	218.6	234.7	240.8	254.2	245.2		227.8
Shipping Sack	99.8	97.9	101.9	105.1	104.4	130.2		95.3
Other Converting 1/	418.7	397.9	409.8	391.7	350.4	340.1		255.1
Glassine, Greprf. and Veg. Parch. (Census)	216.4	203.3	205.8	234.0	230.5	240.5		191.2
Special Industrial Papers (Census)	475.0	455.1	474.3	544.8	650.1	651.3	RS	485.7
Total Tissue Papers (Census)	3,610.9	3,718.5	3,832.7	3,976.7	4,038.8	4,086.4		3,979.6
Total Sanitary Tissue Stock	3,368.7	3,494.0	3,604.4	3,746.2	3,771.8	3,823.2		3,772.1
Toilet Tissue	1,274.7	1,323.1	1,376.2	1,398.7	1,440.5	1,466.1		1,520.1
Facial Tissue Stock	388.4	365.0	341.1	367.2	361.8	356.9		339.8
Napkin Stock	377.8	381.2	394.7	419.3	447.7	442.5		462.1
Towelling*	1,136.9	1,168.1	1,183.7	1,249.4	1,276.4	1,333.2		1,248.5
Wiper Stock*	58.8	55.8	54.9	59.4	61.3	45.3		37.0
Other Sanitary Tissue*	134.1	200.8	253.8	252.2	184.1	179.2		164.6
Total All Other Tissue	242.2	224.5	228.3	230.5	267.0	263.2		207.5

E – Estimated 1/ Excludes Bleached Kraft Envelope Paper 2/ API data RS – Revised Series # – Basis weight change from 32 lb. to 30 lb.
Note (Census): Current Industrial Reports, Pulp, Paper and Board

TABLE II (Cont.)

TOTAL PAPER SHIPMENTS

1962 – 1989

(Thousands of Tons)

	1976	1977	1978	1979	1980	1981	1982 R
TOTAL PAPER, ALL GRADES	26,577.4	27,721.6	28,319.5	29,666.2	30,116.3	30,900.8	30,245.0
Newsprint Production	3,735.9	3,870.5	3,767.5	4,061.9	4,672.3	5,238.6	5,041.9
Total Printing–Writing Papers 6/	13,207.3	13,835.9	14,548.7	15,297.4	15,522.0	15,694.3	15,574.9
Uncoated Groundwood	1,320.6	1,359.7	1,354.4	1,509.0	1,498.8	1,471.1	1,470.8
Publishing and Printing	1,066.5	1,082.4	1,061.0	1,186.0	1,178.2	1,113.1	1,123.1
Converting	254.1	277.3	293.4	323.0	320.6	358.0	347.7
Coated Papers	3,933.1	4,210.3	4,399.9	4,472.3	4,621.6	4,892.7	4,991.0
Coated Groundwood	N.A.	N.A.	N.A.	N.A.	2,664.7	2,778.8	2,950.2
Coated Free Sheet	N.A.	N.A.	N.A.	N.A.	1,956.9	2,113.9	2,040.8
Uncoated Free Sheet Papers 6/	6,452.8	6,748.8	7,202.0	7,817.1	7,984.2	7,867.4	7,809.3
Bond and Writing	1,278.9	1,353.5	1,424.7	1,578.3	1,789.7	1,694.0	1,768.5
Form Bond	1,164.4	1,208.3	1,330.5	1,449.3	1,491.6	1,580.3	1,510.4
Ledger, Mimeograph and Manifold	170.6	161.4	161.7	154.4	151.1	129.4	105.0
Duplicating	136.0	147.0	149.5	153.3	173.6	147.6	139.8
Papeterie and Wedding	47.5	43.6	49.2	56.4	46.2	45.6	42.0
Carbonless	190.0	225.0	250.0	300.0	338.8	375.2	378.7
Cover and Text Papers	175.3	189.1	212.1	243.1	238.2	243.0	235.1
M.F., E.F. & Super Calendered	69.3	66.1	69.5	85.9	78.7	77.3	66.7
Offset	1,761.4	1,889.5	1,920.2	2,155.2	2,071.2	2,018.5	2,017.6
White Wove Envelope	519.9	554.4	592.3	634.9	649.9	638.3	638.7
Tablet	299.6	285.4	350.4	320.1	323.1	316.9	345.3
Kraft Envelope Papers: Total	204.0	203.3	230.2	234.4	226.2	221.5	207.8
Brown Kraft – Estimated	101.4	101.1	121.1	115.6	111.7	111.0	102.2
Bleached Kraft – Estimated	102.6	102.2	109.1	118.8	114.5	110.5	105.6
Other	415.9	422.2	461.7	451.8	405.9	379.8	351.7
Thin Papers	348.4	338.7	351.7	371.4	333.0	353.4	297.0
Cotton Fiber Papers	104.2	108.5	114.4	124.6	126.3	125.6	120.2
Bond and Writing	75.8	80.2	84.4	93.1	95.2	95.3	94.8
Other Business	15.8	15.6	16.3	16.6	14.1	13.7	11.0
Technical and Other	12.6	12.7	13.7	14.9	17.0	16.6	14.4
Bleached Bristols	1,048.2	1,069.9	1,126.3	1,003.0	958.1	984.1	886.6
Tabulating Index	334.3	338.0	310.6	217.0	202.3	152.8	123.2
Tag	177.6	177.1	207.7	208.7	177.7	194.3	168.9
File Folder	92.0	99.3	112.3	127.6	114.0	127.0	121.1
Index Bristol	140.8	135.6	143.4	137.9	147.0	143.4	133.4
Printing Bristol	43.0	46.4	51.3	53.0	52.1	51.1	49.6
Postcard	1.4	1.3	0.6	0.2	0.4	1.4	2.4
Coated Bristol	259.1	272.2	300.4	258.6	264.6	314.1	288.0
Total Packaging and Industrial Papers	5,450.6	5,729.6	5,788.6	5,786.4	5,483.5	5,450.4	5,190.6
Kraft, Glassine, Greaseproof & Veg. Parchment	4,824.0	5,151.2	5,237.6	5,196.8	4,961.0	4,396.8 2/RS	4,234.0
Unbleached Kraft Papers	3,788.1	3,805.6	3,863.4	3,931.0	3,815.8	3,569.1 RS	3,412.5
Wrapping	150.0	156.4	156.3	149.6	115.7	99.1 RS	86.3
Bag and Sack (Exc. Shipping Sack)	2,106.2	2,099.7	2,224.5	2,225.8	2,269.4	2,207.9 RS	2,209.7
Shipping Sack	1,004.2	1,035.0	990.3	1,085.8	1,033.3	1,014.6 2/	895.1
Other Converting	527.7	514.5	492.3	469.8	397.4	247.5 RS	221.4
Bleached Packaging Papers (Census)	828.7	1,127.0 *	1,115.2 *	1,031.9	943.5	375.8 RS	381.6
Wrapping	126.4	136.1	154.2	118.9	102.6	33.1 2/RS	31.3
Bag and Sack (Exc. Shipping Sack)	273.9	304.1	276.7	250.4	228.6	212.0 2/RS	217.5
Shipping Sack	127.6	106.8	91.6	102.4	92.0	73.9 2/	77.9
Other Converting 1/	300.8	580.0	592.7	560.2	520.3	56.7 RS	54.9
Glassine, Greprf. and Veg. Parch. (Census)	207.2	218.8	259.0	233.9	201.7	451.9 #	439.9 #
Special Industrial Papers (Census) 6/	626.6	578.4	551.0	589.6	522.5	1,053.6 RS	956.6
Total Tissue Papers (Census)	4,183.6	4,285.6	4,214.7	4,520.5	4,438.5	4,517.5	4,437.6
Total Sanitary Tissue Stock	3,954.7	4,069.6	4,017.3	4,324.5	4,284.6	4,366.8	4,289.3
Toilet Tissue	1,608.9	1,660.2	1,643.2	1,742.4	1,685.0	1,714.0	1,748.2
Facial Tissue Stock	335.1	336.0	329.0	357.9	360.4	369.4	359.3
Napkin Stock	455.2	491.9	493.1	537.2	561.8	577.6	606.1
Towelling*	1,323.2	1,353.4	1,317.6	1,404.0	1,392.4	1,415.3	1,334.1
Wiper Stock*	46.4	43.8	44.8	58.8	58.0	77.5	50.8
Other Sanitary Tissue*	185.9	184.3	189.6	224.2	227.0	213.0	190.8
Total All Other Tissue	228.9	216.0	197.4	196.0	153.9	150.7	148.3

NOTE (Census): Current Industrial Reports, Pulp, Paper and Board RS – Revised Series * Data overstated by about 10% based on 1980 revision of 1979 data.
1/ Excludes Bleached Kraft Envelope Paper 2/ API data 6/ Series revised from 1968 to present. # Specialty Packaging NA – Not Available

TABLE II (Cont.)

TOTAL PAPER SHIPMENTS

1982 – 1989

(Thousands of Tons)

	1983 R	1984 R	1985 R	1986 R	1987 R	1988 R	1989	
TOTAL PAPER, ALL GRADES	32,803.0	34,446.4	34,066.4	35,550.0	36,926.4	38,351.3	38,247.7	
Newsprint Production	5,167.0	5,538.8	5,427.7	5,630.0	5,842.0	5,982.0	6,088.0	
Total Printing–Writing Papers	17,364.7	18,420.0	18,468.5	19,678.0	20,810.0	21,860.0	21,607.2	
Uncoated Groundwood	1,530.8	1,585.3	1,520.9	1,539.6	1,498.2	1,623.6	1,742.7	
Publishing and Printing	1,187.9	1,252.2	1,229.8	1,212.9	1,197.7	1,373.7	553.8	NS1
Converting	342.9	313.1	291.1	326.7	300.5	249.9	1,188.9	NS2
Coated Papers	5,715.8	6,248.9	5,875.1	6,262.7	6,859.6	7,359.0	7,215.4	
Coated Groundwood	3,340.6	3,650.1	3,393.4	3,506.5	3,811.1	4,204.2	4,058.7	
Coated Free Sheet	2,375.2	2,598.8	2,481.7	2,756.2	3,048.5	3,154.8	3,156.7	
Uncoated Free Sheet Papers	8,725.7	9,152.0	9,689.9	10,409.5	10,975.8	11,277.0	11,080.7	
Bond and Writing	2,057.3	2,114.8	2,288.5	2,496.9	2,776.1	2,953.1	2,981.3	
Form Bond	1,687.5	1,829.4	1,921.8	2,150.6	2,157.4	2,127.3	2,112.2	
Ledger, Mimeograph and Manifold	110.2	100.5	96.4	97.9	87.4	71.1	78.1	
Duplicating	132.1	117.4	101.9	78.4	61.3	45.0	35.3	
Papeterie and Wedding	38.7	42.8	41.4	43.1	40.5	39.8	45.5	
Carbonless 4/	400.0	443.4	495.8	541.3	599.2	684.4	701.7	
Cover and Text Papers	276.0	299.2	288.9	310.0	329.1	348.6	441.8	NC
M.F., E.F. & Super Calendered	87.5	79.2	77.4	83.5	74.5	86.0	83.1	
Offset	2,209.8	2,396.4	2,469.1	2,633.6	2,818.5	2,917.9	2,627.6	NC
White Wove Envelope	715.1	773.7	789.3	867.1	916.2	942.5	923.1	
Tablet	406.1	299.2	443.2	411.5	424.5	378.6	367.2	
Kraft Envelope Papers: Total	230.7	237.4	234.7	254.1	255.9	268.9	233.9	
Brown Kraft – Estimated	114.2	113.8	125.4	132.5	131.8	144.3	127.8	
Bleached Kraft – Estimated	116.5	123.6	109.3	121.6	124.1	124.6	106.1	
Other	374.7	418.6	441.5	441.5	435.2	413.8	449.9	
Thin Papers	292.4	303.4	263.0	270.7	262.0	281.0	244.5	
Cotton Fiber Papers	132.7	147.2	144.1	152.0	162.8	169.3	160.8	
Bond and Writing	105.9	119.4	117.4	125.4	136.1	140.2	131.1	
Other Business	10.6	8.8	8.7	7.2	7.3	7.4	6.5	
Technical and Other	16.2	19.0	18.0	19.4	19.4	21.7	23.2	
Bleached Bristols	967.3	1,003.2	975.5	1,043.5	1,051.6	1,150.1	1,163.1	
Tabulating Index	106.7	67.6	70.0	60.0	50.0	40.0	35.0	
Tag	190.9	196.7	184.1	186.6	184.1	185.7	175.2	
File Folder	144.8	140.9	165.0	179.8	194.2	213.5	221.1	
Index Bristol	140.9	146.5	146.5	147.7	144.2	152.7	145.6	
Printing Bristol	55.4	56.6	57.4	59.7	62.6	67.4	67.1	
Postcard	1.9	2.8	3.2	5.8	5.4	3.2	5.3	
Coated Bristol	326.7	392.1	349.3	403.9	411.1	487.6	513.8	
Total Packaging and Industrial Papers	5,482.7	5,567.0	5,229.7	5,147.4	4,973.5	5,033.2	4,916.0	
Kraft, Glassine, Greaseproof & Veg. Parchment	4,442.5	4,474.7	4,187.2	4,061.3	3,791.4	3,822.1	3,668.4	
Unbleached Kraft Papers	3,505.4 3/	3,519.5	3,246.1	3,115.5	2,839.5	2,800.1	2,681.3	
Wrapping	93.2	90.5	86.0	89.0	79.9	83.3	97.3	
Bag and Sack (Exc. Shipping Sack)	2,287.5	2,290.9	2,115.3	2,048.4	1,763.5	1,664.3	1,658.3	
Shipping Sack	878.9	883.3	796.8	747.4	784.0	840.0	771.8	
Other Converting	245.8	254.8	248.0	230.7	212.1	192.5	153.9	
Bleached Packaging Papers	429.3	454.2	436.8	435.6	406.6	465.0	467.5	
Wrapping	31.1	26.9	21.5	16.1	16.0	24.1	28.2	
Bag and Sack (Exc. Shipping Sack)	235.6	254.2	261.5	259.2	237.9	261.5	255.8	
Shipping Sack	88.5	90.1	80.1	84.4	98.2	110.6	101.8	
Other Converting 1/	74.1	83.0	73.7	75.9	54.5	68.8	81.7	
Specialty Packaging	507.8	501.0	504.3	510.2	545.3	557.0	519.6	
Special Industrial Papers R	1,040.2	1,092.3	1,042.5	1,086.1	1,182.1	1,211.1	1,247.6	
Total Tissue Papers (Census)	4,788.6	4,920.6	4,940.5	5,094.6	5,300.9	5,476.1	5,636.5	
Total Sanitary Tissue Stock	4,611.2	4,760.6	4,797.5	4,943.6	5,137.2	5,282.4	5,442.2	
Toilet Tissue	1,835.2	1,851.6	1,882.4	1,905.6	1,930.0	2,032.3	2,151.7	
Facial Tissue Stock	389.3	378.5	353.8	359.1	345.2	351.4	353.6	
Napkin Stock	532.6	569.8	579.0	613.7	668.4	697.4	693.3	
Towelling	1,577.2	1,670.8	1,700.4	1,768.1	1,850.2	1,863.3	1,901.9	
Wiper Stock	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
Other Sanitary Tissue	276.9	289.9	281.9	297.1	343.4	338.0	341.7	
Total All Other Tissue	177.4	160.0	143.0	151.0	163.7	193.7	194.3	

1/ Excludes Bleached Kraft Envelope Paper 2/ API data series R – Revised RS – Revised Series P – Preliminary NA – Not Available

3/ Data after 1983 may not be fully comparable to earlier data because of changes in procedures in calculating the total industry shipments. 4/ Includes base stock.

NS1–New Series 1989–Supercalendered (1988–464.7). NS2–New Series 1989–Other (1988–1,158.9). NC–Not Comparable to earlier data due to grade changes.

TABLE III

PAPERBOARD PRODUCTION 1955-1989

BY END USE

THOUSAND TONS	PAPERBOARD	CONTAINERBOARD-DOMESTIC USE			
YEAR	TOTAL	Total	Linerboard	Corrugating Material	Chip and Filler Boards
1955	14,043.7	7,244.2	4,789.6	2,165.4	289.2
1956	14,371.6	7,451.3	4,933.4	2,249.5	268.4
1957	14,181.9	7,337.2	4,869.7	2,215.6	251.9
1958	14,237.0	7,259.2	4,818.9	2,191.3	249.0
1959	15,972.0	8,232.0	5,475.4	2,498.8	257.8
1960	15,926.5	8,186.6	5,474.8	2,461.0	250.8
1961	16,727.3	8,661.3	5,753.9	2,649.3	258.1
1962	17,847.4	9,299.0	6,216.5	2,822.1	260.4
1963	18,593.6	9,638.3	6,414.0	2,961.8	262.5
1964	19,953.8	10,341.9	6,907.5	3,165.1	269.3
1965	21,331.5	11,199.1	7,480.6	3,438.2	280.3
1966	23,178.6	12,459.6	8,347.3	3,799.8	312.5
1967	22,819.3	12,248.6	8,215.6	3,743.5	289.5
1968	24,903.6	13,388.4	9,043.7	4,061.9	282.8
1969	26,375.7	14,396.4	9,692.5	4,395.4	308.6
1970RS	25,367.5	13,756.6	9,403.1	4,264.0	89.5 *
1971	26,019.1	14,125.5	9,530.8	4,519.7	75.0
1972	28,483.3	15,772.3	10,856.5	4,846.6	69.2
1973	29,548.9	16,689.7	11,355.8	5,255.1	78.8
1974	28,893.6	16,552.3	11,305.5	5,179.3	67.5
1975	24,736.3	14,354.3	9,854.3	4,449.3	50.7
1976	28,415.6	16,493.1	11,375.9	5,061.4	55.8
1977	28,934.7	16,951.3	11,695.8	5,207.9	47.6
1978	30,251.1	17,687.0	12,133.7	5,503.1	50.2
1979	31,404.1	18,649.6	12,819.6	5,775.9	54.1
1980	30,925.9	17,886.7	12,393.1	5,445.6	48.0
1981	31,208.3	18,811.7	13,078.5	5,702.0	31.2
1982	29,044.7	17,309.4	11,935.5	5,341.8	32.1
1983	32,145.7	18,999.8	13,124.7	5,838.1	37.0
1984	34,002.1	20,715.4	14,272.5	6,404.2	38.7
1985	32,921.8	20,042.2	13,752.9	6,255.4	33.9
1986	35,355.4	21,443.3	14,725.8	6,686.6	30.9
1987	37,442.0	23,047.1	15,992.7	7,016.9	37.5
1988	38,103.0	23,562.9	16,177.3	7,350.7	35.0
1989	38,456.2	23,751.8	16,399.3	7,338.7	13.8

*Reclassification. Balance of chip board (non-containerboard grades) included in "All Other." RS = Revised Series

TABLE III (Cont.)

PAPERBOARD PRODUCTION 1955-1989

BY END USE

THOUSAND TONS	BOXBOARD-DOMESTIC USE				ALL OTHER
YEAR	Total	Folding	Set-Up	Milk Carton & Food Service	Total
1955	4,407.4	2,938.8	636.7	831.9	2,392.1
1956	4,530.3	2,970.9	636.7	922.7	2,390.0
1957	4,513.4	3,020.8	568.2	924.4	2,331.3
1958	4,533.3	3,032.5	538.6	962.2	2,444.5
1959	4,911.4	3,285.9	576.1	1,049.4	2,828.6
1960	4,894.9	3,291.2	525.1	1,078.6	2,845.0
1961	5,007.5	3,374.8	496.8	1,135.9	3,058.5
1962	5,265.2	3,501.8	523.8	1,239.6	3,283.2
1963	5,417.2	3,635.8	526.8	1,254.6	3,538.1
1964	5,580.8	3,752.3	534.0	1,294.5	4,031.1
1965	5,811.2	3,879.6	547.3	1,384.3	4,321.2
1966	6,075.9	4,040.3	559.7	1,475.9	4,643.1
1967	5,973.1	4,020.7	496.1	1,456.3	4,597.6
1968	6,334.0	4,218.3	519.5	1,596.2	5,181.2
1969	6,424.8	4,261.6	498.6	1,664.6	5,554.5
1970RS	6,303.1	4,144.1	466.5	1,692.5	5,307.8
1971	6,195.7	4,101.4	448.0	1,646.3	5,697.9
1972	6,531.6	4,420.5	455.1	1,656.0	6,179.4
1973	6,741.8	4,682.1	465.3	1,594.4	6,117.4
1974	6,377.7	4,405.2	403.6	1,568.9	5,963.6
1975	5,644.6	3,877.2	304.5	1,462.9	4,737.4
1976	6,540.8	4,690.9	331.4	1,518.5	5,381.7
1977	6,313.9	4,528.3	302.5	1,483.1	5,669.5
1978	6,457.4	4,678.5	332.7	1,446.2	6,106.7
1979	6,443.8	4,695.1	306.0	1,442.7	6,310.7
1980	6,126.6	4,463.5	241.5	1,421.6	6,912.6
1981	6,192.5	4,563.9	236.0	1,392.6	6,204.1
1982	5,820.2	4,313.0	223.6	1,283.6	5,915.1
1983	6,230.1	4,615.1	256.3	1,358.7	6,915.8
1984	6,498.6	4,839.0	263.8	1,395.8	6,788.1
1985	6,412.8	4,805.1	226.6	1,381.1	6,466.8
1986	6,671.1	5,056.5	219.3	1,395.3	7,241.0
1987	6,874.1	5,209.7	242.5	1,421.9	7,520.8
1988	7,013.9	5,292.7	278.7	1,442.4	7,526.2
1989	7,076.4	5,370.0	287.8	1,418.6	7,628.0

TABLE IV

CONTAINERBOARD PRODUCTION 1955-1989

FOR DOMESTIC USE

THOUSAND TONS	CONTAINERBOARD	LINERBOARD		
YEAR	TOTAL	Total	Kraft	Recycled
1955	7,244.2	4,789.6	3,947.4	842.2
1956	7,451.3	4,933.4	4,139.6	793.8
1957	7,337.2	4,869.7	4,097.9	771.8
1958	7,259.2	4,818.9	4,110.2	708.7
1959	8,232.0	5,475.4	4,701.0	774.4
1960	8,186.6	5,474.8	4,731.2	743.6
1961	8,661.3	5,753.9	5,095.7	658.2
1962	9,299.0	6,216.5	5,514.7	701.8
1963	9,638.3	6,414.0	5,706.1	707.9
1964	10,341.9	6,907.5	6,188.0	719.5
1965	11,199.1	7,480.6	6,698.1	782.5
1966	12,459.6	8,347.3	7,550.2	797.1
1967	12,248.6	8,215.6	7,693.3	522.3
1968	13,388.4	9,043.7	8,612.2	431.5
1969	14,396.4	9,692.5	9,345.3	347.2
1970RS	13,756.6	9,403.1	9,133.4	269.7
1971	14,125.5	9,530.8	9,249.1	281.7
1972	15,772.3	10,856.5	10,577.6	278.9
1973	16,689.7	11,355.8	11,066.8	289.0
1974	16,552.3	11,305.5	10,838.4	467.1
1975	14,354.3	9,854.3	96,417.0	207.3
1976	16,493.1	11,375.9	11,093.2	282.7
1977	16,951.3	11,695.8	11,354.4	341.4
1978	17,687.0	12,133.7	11,877.3	256.4
1979	18,649.6	12,819.6	12,417.3	402.3
1980	17,886.7	12,393.1	11,948.6	444.5
1981	18,811.7	13,078.5	12,754.3	324.2
1982	17,309.4	11,935.5	11,656.5	279.0
1983	18,999.8	13,124.7	12,835.6	289.1
1984	20,715.4	14,272.5	14,068.8	203.7
1985	20,042.2	13,752.9	13,467.1	285.8
1986	21,443.0	14,725.8	14,305.5	420.3
1987	23,047.1	15,992.7	15,514.4	478.3
1988	23,562.9	16,177.0	15,770.6	406.4
1989	23,751.8	16,399.3	16,011.1	388.2

RS = Revised Series

TABLE IV (Cont.)

CONTAINERBOARD PRODUCTION 1955-1989

FOR DOMESTIC USE

THOUSAND TONS	CORRUGATING MATERIAL			CHIP AND FILLER BOARDS
YEAR	Total	Semi-Chemical#	Recycled	Total
1955	2,165.4	1,470.2	695.2	289.2
1956	2,249.5	1,551.7	697.8	268.4
1957	2,215.6	1,557.8	657.8	251.9
1958	2,191.3	1,486.2	705.1	249.0
1959	2,498.8	1,786.1	712.7	257.8
1960	2,461.0	1,788.9	672.1	250.8
1961	2,649.3	2,023.5	625.8	258.1
1962	2,822.1	2,188.8	633.3	260.4
1963	2,961.8	2,287.1	674.7	262.5
1964	3,165.1	2,447.4	717.7	269.3
1965	3,438.2	2,638.2	800.0	280.3
1966	3,799.8	2,909.8	890.0	312.5
1967	3,743.5	2,982.1	761.4	289.5
1968	4,061.9	3,371.2	690.7	282.8
1969	4,395.4	3,617.0	778.4	308.0
1970RS	4,264.0	3,404.7	859.3	89.5 *
1971	4,519.7	3,580.2	939.5	75.0
1972	4,846.6	3,874.3	972.3	69.2
1973	5,255.1	4,126.6	1,128.5	78.8
1974	5,179.3	4,010.3	1,169.0	67.5
1975	4,449.3	3,579.3	870.0	50.7
1976	5,061.4	3,986.4	1,075.0	55.8
1977	5,207.9	4,128.2	1,079.7	47.6
1978	5,503.1	4,305.3	1,197.8	50.2
1979	5,775.9	4,573.6	1,202.3	54.1
1980	5,445.6	4,398.5	1,047.1	48.0
1981	5,702.0	4,561.2	1,140.8	31.2
1982	5,341.8	4,202.5	1,139.3	32.1
1983	5,838.1	4,532.7	1,305.4	37.0
1984	6,404.2	5,018.8	1,385.4	38.7
1985	6,255.4	4,896.6	1,358.8	33.9
1986	6,686.6	5,160.8	1,525.8	30.9
1987	7,016.9	5,343.8	1,673.1	37.5
1988	7,350.9	5,527.7	1,823.2	35.0
1989	7,338.7	5,553.5	1,785.2	13.8

#Includes a small amount of unbleached kraft for years 1970-1976. RS = Revised Series

*Reclassification. Balance of chipboard (non-containerboard grades) included in "All Other."

TABLE V

BLEACHED PAPERBOARD PRODUCTION 1960 - 1989

THOUSAND TONS YEAR	Milk Cartons	Folding Cartons	Heavyweight Cup, Rounded Nested Food Containers and Cup Lids	Plate Dish and Tray	Other Packaging Uses*	Linerboard
1960	571.0	745.2	287.4	123.7	136.2	76.0
1961	600.5	797.6	312.9	127.9	146.1	103.5
1962	678.5	865.1	324.4	148.4	139.2	124.2
1963	677.1	943.0	325.3	160.2	153.4	124.2
1964	692.0	988.8	329.2	178.8	182.3	101.1
1965	752.1	1,051.8	339.0	202.1	182.6	75.0
1966	783.2	1,100.7	367.2	232.1	200.4	100.3
1967	772.8	1,133.8	368.6	247.3	171.4	89.5
1968	848.8	1,234.1	412.0	258.9	195.1	104.9
1969	884.6	1,346.0	416.2	282.2	200.9	113.6
1970RS	940.7	1,327.7	374.2	279.6	198.6	118.8
1971	918.8	1,354.1	366.7	272.9	245.9	124.4
1972	894.4	1,553.5	395.6	313.3	288.6	129.8
1973	871.2	1,705.7	410.4	296.5	348.5	127.7
1974	850.2	1,654.6	415.8	289.6	382.7	99.4
1975	865.8	1,436.3	350.6	233.4	315.8	81.8
1976	922.9	1,773.4	412.3	266.7	402.2	99.5
1977	808.7	1,573.2	401.3	262.4	525.2	85.0
1978	731.2	1,739.5	418.7	287.1	614.9	115.7
1979**	718.7	1,688.8	432.0	274.1	690.2	110.9
1980	677.6	1,548.3	419.5	298.4	747.2	96.3
1981	631.8	1,631.2	441.7	287.4	749.2	100.6
1982	590.5	1,546.2	374.8	274.5	726.9	93.4
1983	606.9	1,693.7	426.3	281.1	734.7	115.0
1984	632.7	1,809.6	416.4	303.5	700.3	118.5
1985	609.0	1,742.0	438.2	284.0	693.6	113.8
1986	581.4	1,911.3	437.2	322.2	779.6	132.0
1987	619.5	2,002.8	444.1	316.0	843.2	134.3
1988	606.3	2,016.5	467.5	324.1	878.0	169.6
1989	565.6	1,980.4	452.4	362.1	915.6	177.7

* - Includes Exports

** - Starting in 1979 lightweight cup is included with heavyweight cup. RS - Revised Series

TABLE V (Cont.)

BLEACHED PAPERBOARD PRODUCTION 1960 - 1989

THOUSAND TONS	SUMMARY OF PACKAGING PAPERBOARD			NON-PKG. USES	BLEACHED PAPERBOARD PRODUCTION
YEAR	Total Packaging Paperboard	Milk Carton and Food Service	Balance of Packaging Uses*	Total	Total
1960	1,939.5	1,078.6	860.9	119.7	2,059.2
1961	4,088.5	1,135.9	952.6	151.5	2,240.0
1962	2,279.8	1,239.6	1,040.2	173.6	2,453.4
1963	2,383.2	1,254.6	1,128.6	181.8	2,565.0
1964	2,472.2	1,294.5	1,177.7	220.8	2,693.0
1965	2,602.6	1,384.3	1,218.3	244.4	2,847.0
1966	2,783.9	1,475.9	1,308.0	301.4	3,085.3
1967	2,783.4	1,456.3	1,327.1	273.8	3,057.2
1968	3,053.8	1,596.2	457.6	314.0	3,367.9
1969	3,243.5	1,664.6	1,578.9	316.4	3,559.9
1970RS	3,239.6	1,649.0	1,590.6	87.8	3,327.4
1971	3,282.8	1,604.3	1,678.5	80.5	3,363.3
1972	3,575.2	1,623.4	1,951.8	91.9	3,667.1
1973	3,760.0	1,594.3	2,165.7	81.5	3,841.5
1974	3,692.3	1,568.7	2,123.6	59.5	3,751.8
1975	3,283.7	1,462.1	1,821.6	40.3	3,324.0
1976	3,777.0	1,518.4	2,258.6	43.3	3,820.3
1977	3,655.8	1,483.1	2,172.7	47.2	3,703.0
1978	3,907.1	1,446.2	2,460.9	47.7	3,954.8
1979	3,914.7	1,442.7	2,472.0	58.6	3,973.3
1980	3,787.3	1,421.6	2,365.7	48.5	3,835.8
1981	3,841.9	1,392.6	2,449.3	44.2	3,886.1
1982	3,606.3	1,283.6	2,322.7	37.7	3,644.0
1983	3,861.7	1,358.7	2,503.0	33.1	3,894.8
1984	3,981.0	1,395.8	2,585.2	30.2	4,011.2
1985	3,880.6	1,381.1	2,499.5	30.2	3,910.8
1986	4,163.7	1,395.3	2,768.4	43.5	4,207.2
1987	4,359.9	1,421.9	2,938.0	46.4	4,406.3
1988	4,462.0	1,442.4	3,019.6	48.9	4,510.9
1989	4,453.6	1,418.6	3,035.0	67.6	4,521.4

* - Includes Exports RS = Revised Series

TABLE VI

PAPERBOARD PRODUCTION BY REGION

1965 - 1989

THOUSAND TONS	PAPERBOARD	CONTAINERBOARD-DOMESTIC USE			
YEAR	TOTAL	Total	Linerboard	Corrugating Material	Container Chip & Filler Boards
NORTH EASTERN					
1965	2,874.4	710.0	192.7	481.1	37.0
1966	2,992.1	767.7	208.1	521.4	38.2
1967	2,810.1	695.2	121.5	539.0	34.7
1968	2,820.9	675.7	100.9	534.6	40.2
1969	2,769.6	687.0	83.0	569.2	34.8
1970RS	2,627.8	653.4	60.1	556.6	36.7
1971	2,525.3	634.8	54.4	551.1	29.3
1972	2,622.7	645.8	54.7	562.3	28.8
1973	2,733.9	725.3	56.9	615.3	53.1
1974	2,677.5	852.1	152.7	642.0	57.4
1975	2,052.1	536.4	35.2	445.4	55.8
1976	2,255.2	566.2	70.8	448.2	47.2
1977	2,247.3	562.9	70.8	446.6	45.5
1978	2,284.4	561.3	37.4	470.2	53.7
1979	2,259.8	564.2	61.4	456.7	46.1
1980	2,042.7	486.9	27.3	415.2	44.4
1981	1,867.7	369.9	-	328.5	41.4
1982	1,651.9	342.8	10.8	295.6	36.4
1983	1,891.1	380.3	45.6	317.8	16.9
1984	1,835.3	362.4	-	346.0	16.4
1985	1,828.1	333.3	-	327.3	6.0 *
1986	1,929.8	375.7	-	369.3	6.4
1987	1,997.5	391.0	30.0	375.6	15.1
1988	2,066.6	422.5	15.4	398.6	8.5
1989	2,018.0	402.8	7.8	386.5	8.5
SOUTHERN					
1965	11,270.1	6,680.4	5,330.1	1,318.3	32.0
1966	12,379.9	7,362.5	5,852.5	1,468.8	41.2
1967	12,537.1	7,435.6	5,964.9	1,435.6	35.1
1968	14,081.8	8,313.4	6,740.6	1,538.2	34.6
1969	15,433.1	9,181.1	7,488.2	1,651.4	41.5
1970RS	15,062.9	8,961.4	7,306.7	1,618.4	36.3
1971	15,764.5	9,330.7	7,507.6	1,789.6	33.5
1972	17,464.8	10,671.2	8,658.6	1,988.1	24.5
1973	18,157.0	11,256.8	9,083.5	2,159.0	14.3
1974	17,857.1	11,006.8	8,883.0	2,111.0	12.5
1975	15,733.1	9,882.1	7,957.0	1,860.9	63.4
1976	18,097.2	11,400.7	9,178.0	2,181.3	41.2
1977	18,204.3	11,541.0	9,299.0	2,199.4	42.6
1978	19,516.2	12,268.7	9,890.2	2,331.5	47.0
1979	20,194.2	12,692.1	10,280.6	2,376.9	34.6
1980	20,165.8	12,120.0	9,897.6	2,196.4	26.0
1981	20,418.2	12,863.0	10,527.9	2,300.9	34.2
1982	19,221.8	11,872.3	9,682.3	2,157.3	32.7
1983	20,899.3	12,864.3	10,546.5	2,280.5	37.3
1984	22,238.1	14,143.6	11,536.9	2,568.1	38.6
1985	21,389.7	13,606.5	11,068.8	2,635.2	1.5 *
1986	22,963.6	14,364.3	11,693.4	2,688.5	2.4
1987	24,484.8	15,663.7	12,811.7	3,852.2	-
1988	24,933.4	16,035.3	12,969.1	3,066.2	-
1989	23,925.1	16,312.5	13,236.0	3,076.4	-

NOTE: Exports are included in "All Other." * Reclassification. Balance of chipboard (non-containerboard grades) included in "All Other." Detail does not necessarily add to totals due to rounding. RS - Revised Series

TABLE VI (Cont.)

PAPERBOARD PRODUCTION BY REGION

1965 - 1989

THOUSAND TONS	BOXBOARD-DOMESTIC USE				ALL OTHER	
YEAR	Total	Folding	Set-Up	Milk Carton & Food Service	Total	
NORTH EASTERN						
1965	1,293.0	972.1	248.8	72.1	870.9	
1966	1,302.9	989.6	246.0	67.3	921.5	
1967	1,233.6	954.8	214.8	64.0	881.3	
1968	6,274.2	991.1	220.9	62.2	871.0	
1969	1,178.8	911.9	202.2	64.7	903.8	
1970RS	1,108.1	851.1	194.1	62.9	866.3	
1971	1,003.9	767.1	176.2	60.6	886.6	
1972	1,020.8	788.4	181.3	51.1	956.1	
1973	961.9	752.2	181.0	28.7	1,046.7	
1974	861.6	679.8	154.2	27.6	963.8	
1975	724.5	582.0	116.5	26.0	791.2	
1976	841.1	690.8	120.9	29.4	847.9	
1977	865.1	735.4	102.5	27.2	819.3	
1978	861.1	723.3	112.7	25.0	862.1	
1979	840.9	721.9	85.5	33.5	854.7	
1980	787.8	680.4	72.3	35.1	768.0	
1981	780.1	687.9	63.4	28.8	717.7	
1982	678.1	593.3	59.4	25.4	631.0	
1983	730.9	631.0	74.1	25.8	779.9	
1984	710.1	614.2	71.2	24.7	762.8	
1985	673.8	587.0	65.2	21.6	821.0	*
1986	703.7	649.6	54.1	-	850.4	
1987	758.5	686.9	71.6	-	848.0	
1988	781.3	695.3	86.0	-	862.8	
1989	810.1	724.8	85.3	-	805.1	
SOUTHERN						
1965	2,428.4	12,316.2	122.3	1,089.9	2,162.3	
1966	2,649.2	1,309.9	128.4	1,210.9	2,368.2	
1967	2,666.5	1,385.0	114.1	1,167.4	2,435.0	
1968	2,944.0	1,490.2	127.8	1,326.0	2,824.4	
1969	3,163.2	1,634.6	122.6	1,406.0	3,088.8	
1970RS	2,887.1	1,349.9	113.4	1,423.8	3,214.4	
1971	2,943.0	1,407.0	105.5	1,430.5	3,490.8	
1972	3,110.0	1,555.0	108.4	1,446.6	3,683.6	
1973	3,299.1	1,767.2	118.0	1,413.9	3,601.1	
1974	3,169.1	1,677.3	104.9	1,386.9	3,681.2	
1975	2,870.4	1,517.8	89.6	123.0	2,980.6	
1976	3,329.8	1,899.5	99.7	1,330.6	3,366.7	
1977	3,094.3	1,710.4	96.6	1,287.3	3,569.0	
1978	3,278.4	1,892.7	104.5	1,281.2	3,969.1	
1979	3,250.8	1,869.5	104.5	1,276.8	4,251.3	
1980	3,123.3	1,768.8	100.3	1,254.2	4,922.5	
1981	3,177.3	1,839.2	105.4	1,232.7	4,377.9	
1982	2,991.9	1,740.5	94.5	1,156.9	4,357.6	
1983	3,233.5	1,927.0	98.8	1,207.7	4,801.5	
1984	3,392.8	2,046.0	107.3	1,239.5	4,701.7	
1985	3,294.9	1,990.1	86.4	1,218.4	4,488.3	*
1986	3,483.4	2,118.4	94.4	1,270.6	5,092.1	
1987	3,578.3	2,210.0	93.2	1,275.1	5,246.0	
1988	3,590.6	2,220.7	105.5	1,264.4	5,307.5	
1989	4,549.5	3,130.9	112.3	1,306.3	3,063.1	

NOTE: Exports are included in "All Other." Detail does not necessarily add due to rounding.

NOTE: For this Table unbleached kraft folding has been included in the "All Other" domestic data. RS - Revised Series

TABLE VI (Cont.)

PAPERBOARD PRODUCTION BY REGION

1965 - 1989

THOUSAND TONS	PAPERBOARD	CONTAINERBOARD-DOMESTIC USE			
YEAR	TOTAL	Total	Linerboard	Corrugating Material	Container Chip & Filler Boards
NORTH CENTRAL					
1965	4,031.6	1,796.6	408.7	1,203.8	184.1
1966	4,191.7	1,880.1	400.7	1,282.6	196.8
1967	3,928.6	1,677.6	252.6	1,240.1	184.9
1968	4,174.4	1,802.2	190.1	1,431.4	180.7
1969	4,272.1	1,916.6	160.2	1,539.3	217.2
1970	3,936.0	1,788.9	110.3	1,471.0	207.6
1971	4,041.1	1,854.0	108.8	1,534.1	218.1
1972	4,245.5	1,926.0	106.4	1,597.4	222.2
1973	4,360.5	2,031.9	111.0	1,697.3	223.6
1974	4,186.5	2,005.7	176.6	1,637.9	191.2
1975	3,367.2	1,655.4	63.9	1,448.6	142.9
1976	3,927.9	1,869.8	57.0	1,663.9	148.9
1977	4,091.7	2,010.3	117.2	1,734.3	158.8
1978	4,164.2	2,127.5	98.6	1,870.4	158.5
1979	4,352.9	2,334.9	165.8	2,029.3	139.8
1980	4,137.7	2,271.1	191.4	1,943.5	* 136.1
1981	4,288.2	2,416.9	143.3	2,124.8	148.8
1982	3,979.3	2,210.0	103.9	1,984.3	121.8
1983	4,396.7	2,413.3	60.8	2,227.0	125.5
1984	4,770.4	2,600.9	75.3	2,409.6	116.0
1985	4,565.3	2,441.2	86.8	2,333.4	21.0
1986	4,898.3	2,648.2	73.2	2,555.9	19.6
1987	5,042.9	2,716.5	72.4	2,623.9	20.2
1988	5,136.4	2,778.0	63.5	2,690.5	24.0
1989	6,572.8	2,730.3	42.9	2,685.0	2.4
PACIFIC COAST					
1965	3,155.1	2,011.4	1,549.0	435.1	27.3
1966	3,614.9	2,449.3	1,886.0	527.1	36.3
1967	3,543.5	2,440.3	1,876.6	528.9	34.8
1968	3,826.5	2,597.1	2,012.0	557.8	27.3
1969	3,900.9	2,611.8	1,961.1	635.6	15.1
1970	3,740.8	2,560.6	1,926.0	618.0	16.6
1971	3,688.2	2,533.5	1,867.0	644.9	21.6
1972	4,150.3	2,776.0	2,036.8	698.8	40.4
1973	4,297.5	2,914.0	2,104.4	783.5	26.1
1974	4,172.5	2,902.4	2,092.9	788.3	21.2
1975	3,583.9	2,512.3	1,797.4	694.4	20.5
1976	4,135.3	2,863.5	2,069.9	768.0	25.6
1977	4,391.4	3,053.2	2,208.8	827.6	16.8
1978	4,286.3	2,950.8	2,107.5	831.0	12.3
1979	4,597.2	3,233.6	2,311.8	913.0	8.0
1980	4,579.7	3,192.3	2,276.8	890.5	25.0
1981	4,634.2	3,390.2	2,407.3	947.8	35.1
1982	4,191.7	3,082.4	2,138.5	904.6	39.3
1983	4,958.6	3,515.1	2,471.8	1,012.8	30.5
1984	5,158.3	3,748.2	2,660.3	1,080.5	7.4
1985	5,138.7	3,661.2	2,597.3	1,058.5	5.4
1986	5,587.8	4,054.9	2,959.5	1,092.9	2.5
1987	5,913.6	4,275.9	3,108.3	1,092.9	2.2
1988	5,968.2	4,327.4	3,129.3	1,195.6	2.5
1989	5,940.9	4,306.2	3,112.5	1,191.2	2.5

*Reclassification. Balance of chipboard (non-containerboard grades) included in "All Other."

TABLE VI (Cont.)

PAPERBOARD PRODUCTION BY REGION

1965 - 1989

THOUSAND TONS	BOXBOARD-DOMESTIC				ALL OTHER
YEAR	Total	Folding	Set-Up	Milk Carton & Food Service	Total
NORTH CENTRAL					
1965	1,517.3	1,288.6	150.0	78.7	717.7
1966	1,541.9	1,316.3	160.3	65.3	769.7
1967	1,489.3	1,288.3	140.8	60.2	761.7
1968	1,489.1	1,295.1	150.2	43.8	883.1
1969	1,458.0	1,279.3	154.1	24.6	897.5
1970RS	1,338.3	1,194.3	133.5	10.5	808.8
1971	1,345.5	1,195.8	140.9	8.8	841.6
1972	1,396.3	1,246.0	141.8	8.5	923.2
1973	1,379.4	1,236.3	142.7	4.0	949.2
1974	1,262.3	1,137.6	124.6	1.0	918.5
1975	1,018.4	937.2	80.6	6.0	693.4
1976	1,177.9	1,089.8	88.0	1.0	880.2
1977	1,165.2	1,077.5	87.7	-	916.2
1978	1,123.9	1,031.8	92.1	-	912.8
1979	1,105.5	1,009.7	95.8	-	912.5
1980	1,030.7	978.2	52.5	-	835.9
1981	1,062.3	1,011.8	50.5	-	809.0
1982	1,035.1	984.2	50.9	-	734.2
1983	1,112.1	1,049.8	62.3	-	871.3
1984	1,176.0	1,104.9	71.1	-	993.5
1985	1,154.9	1,090.1	64.8	-	969.2
1986	1,131.1	1,064.4	66.7	-	1,118.5
1987	1,182.7	1,110.0	72.7	-	1,143.7
1988	1,178.0	1,094.3	83.7	-	1,180.4
1989	1,188.5	1,116.1	72.4	-	2,654.0
PACIFIC COAST					
1965	572.6	402.8	26.2	143.6	571.1
1966	582.0	424.5	25.0	132.5	583.6
1967	583.6	392.6	26.3	164.7	519.6
1968	626.8	442.0	20.6	164.2	602.6
1969	624.8	435.8	19.7	169.3	664.3
1970	626.2	405.4	25.5	195.3	554.0
1971	563.7	391.9	25.4	146.4	591.0
1972	614.7	441.3	23.6	149.8	759.6
1973	646.6	471.6	23.6	151.4	736.9
1974	615.0	440.8	19.9	154.3	655.1
1975	568.3	377.2	17.0	173.3	503.3
1976	614.5	433.3	22.8	158.4	657.3
1977	601.4	417.1	15.7	168.6	736.8
1978	576.5	413.1	23.4	140.0	759.0
1979	548.8	396.2	20.2	132.4	814.8
1980	504.4	355.7	16.4	132.3	883.0
1981	500.9	353.1	16.7	131.1	743.1
1982	424.5	304.4	18.8	101.3	684.8
1983	443.5	297.2	21.1	125.2	1,000.0
1984	467.3	321.5	14.2	131.6	942.8
1985	467.5	316.2	10.2	141.1	1,010.0
1986	463.5	334.7	4.1	124.7	1,069.4
1987	489.7	337.9	5.0	146.8	1,148.0
1988	540.1	358.3	3.5	178.3	1,100.7
1989	527.1	398.2	16.6	112.3	1,107.6

NOTES: Exports and Unbleached Kraft Folding in "All Other". Detail may not add due to rounding.

TABLE VII

PAPERBOARD PRODUCTION

BY GRADE AND TYPE 1970 - 1989

THOUSAND TONS	CONTAINERBOARD - DOMESTIC				BOXBOARD - DOMESTIC		
YEAR	Total	Linerboard	Corrugating Material	Container Chip & Filler Board	Total	Folding	Set-Up
Total Paperboard							
1970	13,756.6	9,043.1	4,264.0	89.5 *	6,303.1	4,144.1	466.5
1971	14,125.5	9,530.8	4,519.7	75.0 *	6,195.7	4,101.4	448.1
1972	15,722.3	10,856.5	4,846.6	69.2 *	6,531.6	4,420.5	455.1
1973	16,689.7	11,355.8	5,255.1	78.8 *	6,741.8	4,682.1	465.3
1974	16,552.3	11,306.5	5,179.3	67.5 *	6,377.7	4,405.2	403.6
1975	14,354.3	9,854.3	4,449.3	50.7 *	5,644.6	3,877.2	304.5
1976	16,493.1	11,375.9	5,061.4	55.8 *	6,540.8	4,690.9	331.4
1977	16,951.3	11,695.8	5,207.9	47.6 *	6,313.9	4,528.3	302.5
1978	17,687.0	12,133.7	5,503.1	50.2 *	6,457.4	4,678.5	332.7
1979	18,649.6	12,819.6	5,775.9	54.1 *	6,443.8	4,695.1	306.0
1980	17,866.7	12,293.1	5,445.6	48.0 *	6,126.6	4,463.5	241.5
1981	18,811.7	13,078.5	5,702.0	31.2 *	6,192.5	4,563.9	236.0
1982	17,309.4	11,935.5	5,341.8	32.1 *	5,820.2	4,313.0	223.6
1983	18,999.8	13,124.7	5,838.1	37.0 *	6,230.1	4,615.1	256.3
1984	20,715.4	14,272.5	6,404.2	38.7 *	6,498.6	4,839.0	263.8
1985	20,242.2	13,752.9	6,255.4	33.9 *	6,412.8	4,805.1	226.6
1986	21,446.0	14,725.8	6,689.3	30.9	6,671.1	5,056.5	219.3
1987	23,047.1	15,992.7	7,016.9	37.5	6,874.1	5,209.7	242.5
1988	25,562.9 R	18,177.0 R	7,350.9	35.0	7,013.9 R	5,292.7 R	278.8
1989	23,751.8	16,399.3	7,338.7	13.8	7,076.4	5,370.0	287.8
Unbleached Kraft							
1970	9,043.0	9,014.6	3.8	25.5	343.4	343.4	-
1971	9,155.3	9,124.7	1.1	29.5	339.6	339.6	-
1972	10,469.9	10,447.8	-	22.1	389.8	389.8	-
1973	10,961.6	10,939.1	2.3	10.2	454.8	454.8	-
1974	10,754.3	10,739.0	3.8	11.5	469.7	469.7	-
1975	9,586.0	9,565.2	8.7	12.1	463.0	463.0	-
1976	11,023.9	10,993.7	20.1	10.1	577.5	577.5	-
1977	11,283.0	11,269.4	-	13.6	587.9	587.9	-
1978	11,779.7	11,761.6	-	18.1	617.6	617.6	-
1979	12,306.4	12,306.5	-	-	697.8	697.8	-
1980	11,852.3	11,852.3	-	-	680.4	680.4	-
1981	12,653.7	12,653.7	-	-	671.9	671.9	-
1982	11,563.1	11,563.1	-	-	690.6	690.6	-
1983	12,720.6	12,720.6	-	-	710.1	710.1	-
1984	13,950.3	13,950.3	-	-	752.4	752.4	-
1985	13,353.3	13,353.3	-	-	821.7	821.7	-
1986	14,173.5	14,173.5	-	-	869.4	869.4	-
1987	15,380.1	15,380.1	-	-	864.9	864.9	-
1988	15,600.1 R	15,600.1 R	-	-	923.6	923.6	-
1989	15,833.4	15,833.4	-	-	966.7	966.7	-
Semichemical							
1970	3,400.9	-	3,400.9	-	-	-	-
1971	3,579.1	-	3,479.1	-	-	-	-
1972	3,874.3	-	3,874.3	-	-	-	-
1973	4,124.3	-	4,124.3	-	-	-	-
1974	4,006.5	-	4,006.5	-	-	-	-
1975	3,570.6	-	3,570.6	-	-	-	-
1976	3,966.3	-	3,966.3	-	-	-	-
1977	4,126.2	-	4,126.2	-	-	-	-
1978	4,305.3	-	4,305.3	-	-	-	-
1979	4,573.6	-	4,573.6	-	-	-	-
1980	4,396.5	-	4,396.5	-	-	-	-
1981	4,581.2	-	4,581.2	-	-	-	-
1982	4,202.5	-	4,202.5	-	-	-	-
1983	4,532.7	-	4,532.7	-	-	-	-
1984	5,018.6	-	5,018.6	-	-	-	-
1985	4,896.6	-	4,896.6	-	-	-	-
1986	5,163.5	-	5,163.5	-	-	-	-
1987	5,343.6	-	5,343.6	-	-	-	-
1988	5,527.7	-	5,527.7	-	-	-	-
1989	5,553.5	-	5,553.5	-	-	-	-

- Represents zero R - Revised

* Reclassification. Balance of chipboard (non-containerboard graded) included in "All Other."

TABLE VII (Cont.)

PAPERBOARD PRODUCTION

BY GRADE AND TYPE 1970 - 1989

THOUSAND TONS	BOXBOARD (CONT.)	ALL OTHER (Exc. Exports)				EXPORTS	ALL GRADES
YEAR	Milk Carton & Food Service	TOTAL	Gypsum Wallboard Facings	Tube, Can and Drum	Balance of All Other	Total	Total
Total Paperboard							
1970	1,692.5	3,408.4	775.7	887.2	1,745.5	1,899.5	25,367.5
1971	1,646.3	3,582.4	925.7	925.7	1,721.0	2,115.5	26,019.1
1972	1,656.0	3,947.9	1,016.6	1,065.5	1,865.8	2,231.5	28,483.3
1973	1,594.4	4,102.2	1,050.3	1,145.4	1,906.5	2,015.2	29,548.9
1974	1,568.9	3,814.2	964.1	1,128.5	1,701.6	2,149.4	28,893.6
1975	1,462.9	3,284.1	893.8	907.4	1,482.9	1,453.3	24,736.3
1976	1,518.5	3,672.5	984.5	1,016.6	1,671.4	1,709.2	28,415.6
1977	1,483.1	3,639.1	1,056.8	1,075.9	1,706.4	1,830.4	28,934.7
1978	1,446.2	4,066.8	1,094.0	1,163.0	1,809.8	2,039.9	30,251.1
1979	1,442.7	4,048.1	1,179.9	1,177.2	1,691.0	2,262.6	31,404.1
1980	1,421.6	3,578.2	918.8	1,077.7	1,581.7	3,334.4	30,925.9
1981	1,392.6	3,582.2	887.6	1,114.6	1,580.0	2,621.9	31,208.3
1982	1,283.6	3,261.3	805.2	1,043.2	1,409.9	2,652.8	29,044.7
1983	1,358.7	3,903.8	1,053.8	1,210.8	1,639.2	3,012.0	32,145.7
1984	1,395.8	4,056.8	1,125.2	1,254.8	1,676.8	2,731.3	34,002.1
1985	1,381.1	3,955.5	1,149.4	1,211.4	1,594.7	2,511.3	32,921.8
1986	1,395.3	4,150.3	1,220.1	1,266.3	1,663.9	3,088.0	35,355.4
1987	1,421.9	4,331.2	1,237.0	1,333.9	1,760.3	3,189.6	37,442.0
1988	1,442.4 R	4,395.1 R	1,181.5	1,410.2 R	1,803.4 R	3,131.7 R	38,103.0
1989	1,418.6	4,396.4	1,218.2	1,453.3	1,724.9	3,232.1	38,456.2
Unbleached Kraft							
1970	-	470.3	-	175.4	295.0	1,983.4	11,541.1
1971	-	470.9	-	194.5	276.4	1,834.3	11,800.1
1972	-	521.5	-	223.2	298.3	1,887.5	13,268.7
1973	-	559.4	-	226.2	333.2	1,586.7	13,562.5
1974	-	526.2	-	231.0	295.2	1,582.7	13,322.9
1975	-	435.9	-	175.9	260.0	1,057.9	11,542.8
1976	-	483.5	-	217.5	266.0	1,247.3	13,332.2
1977	-	490.3	-	227.8	262.5	1,289.6	13,650.8
1978	-	508.9	-	250.6	258.3	1,466.3	14,372.5
1979	-	500.9	-	267.0	233.9	1,645.9	15,151.0
1980	-	382.7	-	226.4	156.3	2,379.9	15,295.3
1981	-	390.2	-	219.2	171.0	1,886.5	15,602.3
1982	-	349.7	-	192.9	256.8	1,931.5	14,534.9
1983	-	410.9	-	204.3	206.6	2,280.7	16,122.3
1984	-	396.3	-	191.5	204.8	2,066.4	17,185.4
1985	-	362.6	-	164.2	198.4	1,830.0	16,367.6
1986	-	380.8	-	164.0	216.8	2,236.6	17,680.3
1987	-	350.1	-	160.6	189.5	2,302.8	18,897.9
1988	-	320.0 R	-	155.3 R	164.7 R	2,297.7	19,140.3
1989	-	307.1	-	149.5	157.6	2,363.0	19,790.0
Semichemical							
1970	-	33.2	-	23.7	9.5	64.3	3,518.4
1971	-	17.0	-	14.1	2.9	104.0	3,700.1
1972	-	23.6	-	17.7	5.9	111.7	4,009.6
1973	-	28.6	-	18.3	10.3	107.4	4,260.3
1974	-	23.4	-	17.4	6.0	145.5	4,175.4
1975	-	15.8	-	13.9	1.9	115.4	3,701.8
1976	-	19.4	-	18.2	1.2	119.3	4,105.0
1977	-	14.3	-	14.3	-	121.9	4,264.4
1978	-	14.8	-	14.6	0.2	119.2	4,439.3
1979	-	17.3	-	10.8	6.5	96.2	4,689.1
1980	-	2.7	-	2.4	0.3	322.3	4,723.5
1981	-	2.8	-	2.7	0.1	155.2	4,719.2
1982	-	1.9	-	1.3	0.6	184.9	4,389.3
1983	-	5.1	-	-	5.1	192.6	4,730.4
1984	-	1.0	-	-	1.0	149.2	5,169.0
1985	-	2.0	-	-	2.0	189.4	5,066.0
1986	-	-	-	-	-	212.5	5,376.0
1987	-	-	-	-	-	192.5	5,536.3
1988	-	-	-	-	-	136.3	5,664.0
1989	-	-	-	-	-	137.6	5,691.0

- Represents zero R - Revised

TABLE VII (Cont.)

PAPERBOARD PRODUCTION

BY GRADE AND TYPE 1970 - 1989

THOUSAND TONS	CONTAINERBOARD - DOMESTIC				BOXBOARD - DOMESTIC		
YEAR	Total	Linerboard	Corrugating Material	Container Chip & Filler Board	Total	Folding	Set-Up
Solid Bleached							
1970	118.8	118.8	-	-	2976.7	1327.7	-
1971	124.4	124.4	-	-	2,958.4	1,354.1	-
1972	129.8	129.8	-	-	3,176.9	1,553.5	-
1973	127.7	127.7	-	-	3,300.0	1,705.7	-
1974	99.4	99.4	-	-	3,223.3	1,654.6	-
1975	81.8	81.8	-	-	2,898.7	1,436.3	-
1976	99.5	99.5	-	-	3,291.8	1,773.4	-
1977	85.0	85.0	-	-	3,056.3	15,736.2	-
1978	115.7	115.7	-	-	3,185.7	1,739.5	-
1979	110.9	110.9	-	-	3,131.5	1,688.8	-
1980	96.3	96.3	-	-	2,969.9	1,548.3	-
1981	100.6	100.6	-	-	3,023.8	1,631.2	-
1982	93.4	93.4	-	-	2,829.8	1,546.2	-
1983	115.0	115.0	-	-	3,052.4	1,693.7	-
1984	118.5	118.5	-	-	3,205.4	1,809.6	-
1985	113.8	113.8	-	-	3,123.1	1,742.0	-
1986	132.0	132.0	-	-	3,306.6	1,911.3	-
1987	134.3	134.3	-	-	3,424.7	2,002.8	-
1988	169.6 R	169.6 R	-	-	3,458.9 R	2,016.5 R	-
1989	177.7	177.7	-	-	3,399.0	1,980.4	-
Recycled							
1970	1,193.0	269.7	859.3	64.0 *	2,983.0	2,473.0	466.5
1971	1,266.7	281.7	939.5	45.5 *	2,897.7	2,407.7	448.0
1972	1,298.3	278.9	972.3	47.1 *	2,964.9	2,477.2	455.1
1973	1,486.1	289.0	1,128.5	68.6 *	2,987.0	2,521.6	465.3
1974	1,692.1	467.1	1,169.0	56.0 *	2,684.7	2,280.9	403.6
1975	1,115.9	207.3	870.0	38.6 *	2,283.2	1,977.9	304.5
1976	1,403.4	282.7	1,075.0	45.7 *	2,671.5	2,340.0	331.4
1977	1,455.1	341.4	1,079.7	34.0 *	2,669.7	2,367.2	302.5
1978	1,486.3	256.4	1,197.8	32.1 *	2,654.1	2,321.4	332.7
1979	1,658.7	402.3	1,202.3	54.1 *	2,614.5	2,308.5	306.0
1980	1,539.6	444.5	1,047.1	48.0 *	2,476.3	2,234.8	241.5
1981	1,496.2	324.2	1,140.8	31.2 *	2,496.8	2,260.8	236.0
1982	1,450.4	279.0	1,139.3	32.1 *	2,299.8	2,076.2	223.6
1983	1,631.5	289.1	1,305.4	37.0 *	2,467.6	2,211.3	256.3
1984	1,627.8	203.7	1,385.4	38.7 *	2,540.8	2,277.0	263.8
1985	1,678.5	285.8	1,358.8	33.9 *	2,468.0	2,241.4	226.6
1986	1,977.0	420.3	1,525.8	30.9	2,475.1	2,255.8	219.3
1987	2,188.9	478.3	1,673.1	37.5	3,584.5	2,342.0	242.5
1988	2,264.6 R	406.4 R	1,823.2	35.0	2,631.4 R	2,352.6 R	278.8 R
1989	2,187.2	388.2	1,785.2	13.9	2,690.7	2,402.9	287.8

- Represents zero R - Revised

* Reclassification. Balance of chipboard (non-containerboard graded) included in "All Other."

TABLE VII (Cont.)

PAPERBOARD PRODUCTION

BY GRADE AND TYPE 1970 - 1989

THOUSAND TONS	BOXBOARD (CONT.)	ALL OTHER (Exc. Exports)			EXPORTS	ALL GRADES
YEAR	Milk Carton & Food Service	TOTAL	Gypsum Wallboard Facings	Tube, Can and Drum	Balance of All Other	Total	Total
Solid Bleached							
1970	1,649.1	117.5	-	-	117.5	114.4	3,327.4
1971	1,604.3	124.0	-	-	124.0	156.5	3,363.3
1972	1,623.4	142.6	-	-	142.6	217.8	3,667.1
1973	1,594.3	133.5	-	-	133.5	280.3	3,841.5
1974	1,568.7	108.9	-	-	108.9	320.2	3,751.8
1975	1,462.1	87.6	-	-	87.6	256.2	3,324.0
1976	1,518.4	122.9	-	-	122.9	306.1	3,820.3
1977	1,483.1	172.3	-	-	172.3	389.4	3,703.0
1978	1,446.2	220.5	-	-	220.5	432.9	3,954.8
1979	1,442.7	234.2	-	-	234.5	496.7	3,973.3
1980	1,421.6	220.0	-	-	220.0	549.6	3,835.8
1981	1,392.6	205.3	-	-	205.3	556.4	3,886.1
1982	1,283.6	196.1	-	-	196.1	524.7	3,644.0
1983	1,358.7	213.0	-	-	213.0	514.4	3,894.8
1984	1,395.8	209.0	-	-	209.0	478.3	4,011.2
1985	1,381.1	208.3	-	-	208.3	465.6	3,910.8
1986	1,395.3	199.9	-	-	199.9	568.7	4,207.2
1987	1,421.9	228.4	-	-	228.4	618.9	4,406.3
1988	1,442.4	255.0	-	-	255.0	627.7	4,510.9
1989	1,418.6	251.2	-	-	251.2	693.4	4,521.4
Recycled							
1970	43.5	2,787.3	775.7	688.1	1,323.5	17.3	6,980.6
1971	42.0	2,970.5	935.7	717.1	1,317.7	20.7	7,155.6
1972	32.6	3,260.2	1,016.6	824.6	1,419.0	14.5	7,537.9
1973	0.1	3,380.7	1,050.3	900.9	1,429.5	30.0	7,884.6
1974	0.2	3,155.7	984.1	880.1	1,291.5	101.0	7,633.5
1975	0.8	2,744.8	893.8	717.6	1,133.4	23.8	6,167.7
1976	0.1	3,046.7	984.5	780.9	1,281.3	36.5	7,158.1
1977	-	3,162.2	1,056.8	833.8	1,271.6	29.5	7,316.5
1978	-	3,322.6	1,094.0	897.8	1,330.8	21.5	7,484.5
1979	-	3,295.7	1,179.9	899.4	1,216.4	21.8	7,590.7
1980	-	2,972.8	918.8	848.9	1,205.1	82.6	7,071.3
1981	-	2,983.9	887.6	892.7	1,203.6	23.8	7,000.7
1982	-	2,713.6	805.2	852.0	1,056.4	12.7	6,476.5
1983	-	3,274.8	1,053.8	1,006.5	1,214.5	24.3	7,398.2
1984	-	3,450.5	1,125.2	1,063.3	1,262.0	17.4	7,636.5
1985	-	3,382.6	1,149.4	1,047.2	1,186.0	26.3	7,555.4
1986	-	3,569.6	1,220.1	1,102.3	1,247.2	70.2	8,091.9
1987	-	3,752.7	1,237.0	1,173.3	1,342.4	75.4	8,061.5
1988	-	3,820.1	1,181.5	1,254.9	1,383.7	72.1	8,787.8
1989	-	3,838.1	1,218.2	1,303.8	1,316.1	38.0	8,753.8

- Represents zero.

TABLE VIII

PAPER AND PAPERBOARD

PRODUCTION, NEW SUPPLY AND NEW SUPPLY/REAL G.N.P.

1962–1989

000 Short Tons	1962	1963	1964	1965	1966	1967	1968
Production – Total	37,063	38,647	40,962	43,455	46,701	46,568	50,133
Total Paper	16,560	17,320	18,112	19,157	20,725	20,926	22,181
Total Paperboard	17,848	18,594	19,954	21,332	23,178	22,819	24,890
Unbleached Kraft	6,316	6,750	7,600	8,301 E	9,303 E	9,485 E	10,762
Semichemical	2,198	2,304	2,481	2,681 E	2,969 E	3,057 E	3,475
Bleached Kraft	2,429	2,539	2,666	2,818 E*	3,053 E	3,060 E	3,310 *
Recycled	6,905	7,001	7,207	7,532 E	7,853 E	7,217 E	7,343
Wet Machine Board	146	141	148	144	148	144	155
Building Paper	1,429	1,453	1,533	1,574	1,495	1,503	1,574
Insulating Board	1,080	1,139	1,215	1,248	1,155	1,176	1,333
New Supply							
Total Paper	21,781	22,475	23,747	25,197	27,323	27,232	28,277
Newsprint	7,460	7,498	8,051	8,510	9,268	9,165	9,307
Printing/Writing Papers	7,772	8,153	8,655	9,348	10,362	10,210	10,502
Uncoated Groundwood	942	990	1,053	1,069	1,217	1,163	1,219
Coated	2,266	2,398	2,572	2,767	3,039	3,041	3,045
Uncoated Free Sheet	3,431	3,609	3,824	4,198	4,676	4,584	4,769
Thin and Cotton Fiber	290	287	301	314	351	345	351
Bleached Bristols	843	869	905	1,000	1,079	1,077	1,118
Packaging and Ind. Conv. Papers	4,143	4,258	4,316	4,473	4,610	4,645	5,033
Unbleached Kraft	2,889	3,024	3,038	3,150	3,269	3,233	3,494
Other	1,254	1,234	1,278	1,323	1,341	1,412	1,539
Tissue	2,406	2,566	2,725	2,866	3,083	3,212	3,435
Total Paperboard	17,312	17,941	18,976	20,301	22,063	21,498	23,310
Unbleached Kraft	5,890	6,254	6,843	7,401	8,332	8,317	9,388
Semichemical	2,154	2,221	2,374	2,626	2,905	2,981	3,381
Bleached Board	2,396	2,500	2,621	2,771	2,994	2,999	3,202
Recycled	6,872	6,966	7,138	7,503	7,832	7,201	7,339
Construction and Other	2,644	2,733	2,917	2,972	2,791	2,827	3,073
Total All Grades	41,737	43,149	45,640	48,470	52,177	51,557	54,660
Paper and Products	21,794	22,438	23,689	25,130	27,386	27,238	28,317
Paperboard and Products	17,178	17,810	18,871	21,940	21,940	21,369	22,991
Total Including Products	41,616	42,981	45,477	50,042	52,117	51,434	54,381
Real G.N.P. – $ Bil., 1982 Prices	1,799.4	1,873.3	1,973.3	2,087.6	2,208.3	2,271.3	2,365.6
Ratio of New Supply to Real GNP							
Total Paper	12.105	11.998	12.034	12.070	12.373	11.990	11.953
Newsprint	4.146	4.003	4.080	4.076	4.197	4.035	3.934
Printing/Writing Papers	4.319	4.352	4.386	4.478	4.692	4.495	4.439
Uncoated Groundwood	0.524	0.528	0.534	0.512	0.551	0.512	0.515
Coated	1.259	1.280	1.303	1.325	1.376	1.339	1.287
Uncoated Free Sheet	1.907	1.927	1.938	2.011	2.117	2.018	2.016
Thin and Cotton Fiber	0.161	0.153	0.153	0.150	0.159	0.152	0.148
Bleached Bristols	0.468	0.464	0.459	0.479	0.489	0.474	0.473
Packaging and Ind. Conv. Papers	2.302	2.273	2.187	2.143	2.088	2.045	2.128
Unbleached Kraft	1.606	1.614	1.540	1.509	1.480	1.423	1.477
Other	0.697	0.659	0.648	0.634	0.607	0.622	0.651
Tissue	1.337	1.370	1.381	1.373	1.396	1.414	1.452
Total Paperboard	9.621	9 577	9.616	9.725	9.991	9.465	9.854
Unbleach Kraft	3.273	3.338	3.468	3.545	3.773	3.662	3.969
Semichemical	1.197	1.186	1.203	1.258	1.315	1.312	1.429
Bleached Board	1.332	1.335	1.328	1.327	1.356	1.320	1.354
Recycled	3.819	3.719	3.617	3.594	3.547	3.170	3.102
Construction and Other	1.469	1.459	1.478	1.424	1.264	1.245	1.299
Total All Grades	23.195	23.034	23.129	23.218	23.628	22.699	23.106
Paper and Products	12.112	11.978	12.005	12.038	12.401	11.992	11.970
Paperboard and Products	9.547	9.507	9.563	10.510	9.935	9.408	9.719
Total Including Products	23.128	22.944	23.046	23.971	23.601	22.645	22.988

NOTE: New Supply based on Tables XXXIII and XXXIV imports/exports. * Includes about 5% paper. E – Estimated by API.

TABLE VIII (Cont.)

PAPER AND PAPERBOARD

PRODUCTION, NEW SUPPLY AND NEW SUPPLY/REAL G.N.P.

1962-1989

000 Short Tons	1969	1970	1971	1972	1973	1974	1975
Production - Total	52,914	51,670	53,162	57,435	59,901	59,041	50,976
Total Paper	23,449	23,351	23,722	25,359	26,797	26,863	23,260
Total Paperboard	26,362	25,367	26,019	28,484	29,550	28,894	24,737
Unbleached Kraft	11,816	11,541	11,800	13,269	13,563	13,333	11,543
Semichemical	3,697	3,518	3,700	4,010	4,260	4,175	3,702
Bleached Kraft	3,527	3,327	3,363	3,667	3,842	3,752	3,324
Recycled	7,322	6,981	7,156	7,538	7,885	7,634	6,168
Wet Machine Board	148	139	138	148	149	144	115
Building Paper	1,603	1,594	1,837	1,915	1,858	1,845	1,615
Insulating Board	1,352	1,219	1,446	1,529	1,547	1,295	1,249
New Supply							
Total Paper	29,973	29,650	30,084	32,035	34,028	34,175	28,263
Newsprint	9,959	9,797	9,773	10,269	10,877	10,955	9,048
Printing/Writing Papers	11,218	11,016	11,295	12,312	13,495	13,571	10,933
Uncoated Groundwood	1,306	1,310	1,324	1,334	1,388	1,460	1,317
Coated	3,240	3,168	3,124	3,412	3,711	3,693	3,037
Uncoated Free Sheet	5,163	5,098	5,413	5,996	6,729	6,794	5,295
Thin and Cotton Fiber	371	353	338	390	410	401	334
Bleached Bristols	1,138	1,087	1,096	1,180	1,257	1,223	950
Packaging and Ind. Conv. Papers	5,205	5,139	5,199	5,497	5,640	5,587	4,334
Unbleached Kraft	3,602	3,582	3,598	3,791	3,916	3,951 RS	3,070
Other	1,603	1,557	1,601	1,706	1,724	1,638 RS	1,264
Tissue	3,591	3,696	3,817	3,957	4,016	4,062	3,948
Total Paperboard	24,514	23,478	23,921	26,261	27,567	26,779	23,292
Unbleached Kraft	10,136	9,858	9,976	11,382	11,972	11,760	10,485
Semichemical	3,645	3,434	3,596	3,898	4,153	4,030	3,587
Bleached Board	3,419	3,213	3,207	3,449	3,561	3,432	3,068
Recycled	7,314	6,973	7,142	7,532	7,881	7,557	6,152
Construction and Other	3,105	2,972	3,467	3,650	3,604	3,301	3,001
Total All Grades	57,592	56,100	57,472	61,946	65,199	64,255	54,556
Paper and Products	30,016	29,780	30,389	32,265	34,060	33,740	28,317
Paperboard and Products	24,300	23,216	23,595	26,123	27,340	26,267	22,792
Total Including Products	57,421	55,968	57,451	62,038	65,004	63,308	54,110
Real G.N.P. - $ Bil., 1982 Prices	2,423.3	2,416.7	2,484.8	2,608.5	2,744.1	2,729.3	2,695.0
Ratio of New Supply to Real GNP							
Total Paper	12.369	12.269	12.107	12.281	12.400	12.522	10.487
Newsprint	4.110	4.054	3.933	3.937	3.964	4.014	3.357
Printing/Writing Papers	4.629	4.558	4.546	4.720	4.918	4.972	4.057
Uncoated Groundwood	0.539	0.542	0.533	0.511	0.506	0.535	0.489
Coated	1.337	1.311	1.257	1.308	1.352	1.353	1.127
Uncoated Free Sheet	2.131	2.109	2.178	2.299	2.452	2.489	1.965
Thin and Cotton Fiber	0.153	0.146	0.136	0.150	0.149	0.147	0.124
Bleached Bristols	0.470	0.450	0.441	0.452	0.458	0.448	0.353
Packaging and Ind. Conv. Papers	2.148	2.126	2.092	2.107	2.055	2.047	1.608
Unbleached Kraft	1.486	1.482	1.448	1.453	1.427	1.448	1.139
Other	0.661	0.644	0.644	0.654	0.628	0.599	0.469
Tissue	1.482	1.530	1.536	1.517	1.464	1.488	1.465
Total Paperboard	10.116	9.715	9.627	10.067	10.046	9.812	8.643
Unbleach Kraft	4.183	4.079	4.015	4.363	4.363	4.309	3.891
Semichemical	1.504	1.421	1.447	1.494	1.513	1.477	1.331
Bleached Board	1.411	1.329	1.291	1.322	1.298	1.257	1.138
Recycled	3.018	2.885	2.874	2.887	2.872	2.769	2.283
Construction and Other	1.281	1.230	1.395	1.399	1.313	1.209	1.114
Total All Grades	23.766	23.213	23.129	23.748	23.760	23.543	20.243
Paper and Products	12.386	12.323	12.230	12.369	12.412	12.362	10.507
Paperboard and Products	10.028	9.606	9.496	10.015	9.963	9.624	8.457
Total Including Products	23.695	23.159	23.121	23.783	23.689	23.196	20.078

RS - Revised Series

TABLE VIII (Cont.)

PAPER AND PAPERBOARD

PRODUCTION, NEW SUPPLY AND NEW SUPPLY/REAL G.N.P.

1962-1989

000 Short Tons	1976	1977	1978	1979	1980	1981	1982 R
Production - Total	58,327	60,040	62,048	64,345	63,600	64,259	60,951
Total Paper	26,577	27,721	28,320	29,666	30,116	30,901	30,245
Total Paperboard	28,415	28,935	30,252	31,404	30,926	31,208	29,044
Unbleached Kraft	13,332	13,651	14,373	15,151	15,295	15,602	14,535
Semichemical	4,105	4,264	4,439	4,689	4,724	4,719	4,389
Bleached Kraft	3,820	3,703	3,955	3,973	3,836	3,886	3,644
Recycled	7,158	7,317	7,485	7,591	7,071	7,001	6,476
Wet Machine Board	130	129	136	144	138	160	129
Building Paper	1,771	1,852	1,915	1,868	1,369	1,144	798
Insulating Board	1,434	1,403	1,425	1,263	1,051	846	735
New Supply							
Total Paper	32,513	34,208	35,992	37,450	37,126	37,547	36,610
Newsprint	9,917	10,081	10,788	11,159	11,377	11,694	10,948
Printing/Writing Papers	13,281	14,281	15,244	16,080	16,124	16,139	16,234
Uncoated Groundwood	1,588	1,794	1,907	2,123	2,086	2,001	2,068
Coated	3,842	4,223	4,540	4,586	4,644	4,843	4,979
Uncoated Free Sheet	6,439	6,793	7,230	7,891	8,015	7,870	7,895
Thin and Cotton Fiber	363	384	435	468	415	439	394
Bleached Bristols	1,049	1,087	1,132	1,010	964	986	897
Packaging and Ind. Conv. Papers	5,151	5,577	5,754	5,701	5,243	5,241	5,007
Unbleached Kraft	3,598	3,720	3,884	3,935	3,707	3,654	3,347
Other	1,553	1,857	1,870	1,766	1,536	1,587	1,660
Tissue	4,164	4,269	4,206	4,510	4,382	4,473	4,421
Total Paperboard	26,720	27,132	28,311	29,225	27,689	28,717	26,504
Unbleached Kraft	12,089	12,376	12,938	13,532	12,958	13,784	12,639
Semichemical	3,986	4,142	4,320	4,624	4,433	4,616	4,251
Bleached Board	3,514	3,314	3,522	3,477	3,287	3,330	3,119
Recycled	7,131	7,300	7,531	7,592	7,011	7,007	6,495
Construction and Other	3,367	3,464	3,737	3,598	2,968	2,468	2,025
Total All Grades	62,600	64,804	68,040	70,273	67,783	68,732	65,139
Paper and Products	32,509	34,099	36,177	37,383	37,028	37,333	36,562
Paperboard and Products	26,137	26,678	27,873	28,815	27,172	28,156	26,143
Total Including Products	62,013	64,241	67,787	69,796	67,168	67,957	64,730
Real G.N.P. - $ Bil., 1982 Prices	2,826.7	2,958.6	3,115.2	3,192.4	3,187.1	3,248.7	3,166.0
Ratio of New Supply to Real GNP							
Total Paper	11.502	11.562	11.554	11.731	11.649	11.558	11.563
Newsprint	3.508	3.407	3.463	3.495	3.570	3.600	3.458
Printing/Writing Papers	4.698	4.827	4.893	5.037	5.059	4.968	5.128
Uncoated Groundwood	0.562	0.606	0.612	0.665	0.655	0.616	0.653
Coated	1.359	1.427	1.457	1.437	1.457	1.491	1.573
Uncoated Free Sheet	2.278	2.296	2.321	2.472	2.515	2.423	2.494
Thin and Cotton Fiber	0.128	0.130	0.140	0.147	0.130	0.135	0.124
Bleached Bristols	0.371	0.367	0.363	0.316	0.302	0.304	0.283
Packaging and Ind. Conv. Papers	1.822	1.885	1.847	1.786	1.645	1.613	1.581
Unbleached Kraft	1.273	1.257	1.247	1.233	1.163	1.125	1.057
Other	0.549	0.628	0.600	0.553	0.482	0.489	0.524
Tissue	1.473	1.443	1.350	1.413	1.375	1.377	1.396
Total Paperboard	9.453	9.171	9.068	9.155	8.688	8.840	8.371
Unbleach Kraft	4.277	4.183	4.153	4.239	4.066	4.237	3.992
Semichemical	1.410	1.400	1.387	1.448	1.391	1.421	1.343
Bleached Board	1.243	1.120	1.131	1.089	1.031	1.025	0.985
Recycled	2.523	2.467	2.418	2.378	2.200	2.157	2.051
Construction and Other	1.191	1.171	1.200	1.127	0.931	0.760	0.640
Total All Grades	22.146	21.904	21.841	22.013	21.268	21.157	20.575
Paper and Products	11.501	11.525	11.613	11.710	11.618	11.492	11.548
Paperboard and Products	9.246	9.017	8.947	9.026	8.526	8.667	8.257
Total Including Products	21.938	21.713	21.760	21.863	21.075	20.918	20.445

NOTE: New Supply based on Tables XXXIII and XXXIV imports/exports. * Data overstated by about 10%. R - Revised

TABLE VIII (Cont.)

PAPER AND PAPERBOARD

PRODUCTION, NEW SUPPLY AND NEW SUPPLY/REAL G.N.P.

1962-1989

000 Short Tons	1983 R	1984 R	1985 R	1986 R	1987 R	1988 R	1989 P
Production - Total	66,748	70,248	68,688	72,505	75,957	78,025	78,274
Total Paper	32,803	34,446	34,066	35,550	36,926	38,351	38,248
Total Paperboard	32,145	34,002	32,922	35,355	37,441	38,104	38,456
Unbleached Kraft	16,122	17,185	16,368	17,680	18,898	19,140	19,490
Semichemical	4,730	5,169	5,088	5,376	5,536	5,664	5,691
Bleached Kraft	3,895	4,011	3,911	4,207	4,406	4,511	4,521
Recycled	7,398	7,637	7,555	8,092	8,601	8,789	8,754
Wet Machine Board E	140	140	130	130	120	100	100
Building Paper E	760	700	680	600	600	600	600
Insulating Board E	900	960	890	870	870	870	870
New Supply							
Total Paper	40,216	43,556	43,548	45,306	47,519	49,067	48,276
Newsprint	11,597	12,722	12,838	12,994	13,707	13,670	13,128
Printing/Writing Papers	18,508	20,473	20,569	22,066	23,491	24,893	24,431
Uncoated Groundwood	2,414	2,833	2,871	3,026	3,180	3,356	3,528
Coated	5,799	6,592	6,289	6,686	7,433	8,060	7,821
Uncoated Free Sheet	8,889	9,546	10,005	10,836	11,331	11,810	11,541
Thin and Cotton Fiber	423	478	413	449	459	468	365
Bleached Bristols	983	1,024	991	1,069	1,078	1,199	1,176
Packaging and Ind. Conv. Papers	5,327	5,427	5,163	5,106	5,000	3,029	4,981
Unbleached Kraft	3,431	3,455	3,242	3,153	2,919	2,852	2,795
Other	1,896	1,972	1,921	1,953	2,081	2,177	2,186
Tissue	4,784	4,934	4,978	5,140	5,321	5,495	5,737
Total Paperboard	29,301	31,515	30,595	32,541	34,616	35,317	35,758
Unbleached Kraft	13,890	15,169	14,589	15,513	16,678	16,930	17,212
Semichemical	4,607	5,124	4,964	5,263	5,476	5,673	5,672
Bleached Board	3,380	3,533	3,445	3,639	3,787	3,884	3,828
Recycled	7,424	7,689	7,597	8,126	8,677	8,830	9,046
Construction and Other	2,210	2,222	2,048	1,845	1,792	1,761	1,724
Total All Grades	71,727	77,293	76,191	79,692	83,927	86,165	85,758
Paper and Products	40,032	43,647	43,946	45,713	47,838	49,291	48,593
Paperboard and Products	28,925	31,068	30,144	32,196	33,862	34,392	34,757
Total including Products	71,167	76,937	76,138	79,754	83,492	85,443	85,075
Real G.N.P. - $ Bil., 1982 Prices	3,279.1	3,501.4	3,618.7	3,717.9	3,845.3	4,016.9	4,117.7
Ratio of New Supply to Real GNP							
Total Paper	12.264	12.440	12.034	12.186	12.358	12.220	11.724
Newsprint	3.537	3.633	3.548	3.495	3.565	3.403	3.188
Printing/Writing Papers	5.644	5.847	5.684	5.935	6.109	6.197	5.933
Uncoated Groundwood	0.736	0.809	0.793	0.814	0.827	0.835	0.857
Coated	1.768	1.883	1.738	1.798	1.933	2.007	1.899
Uncoated Free Sheet	2.711	2.726	2.765	2.915	2.947	2.940	2.803
Thin and Cotton Fiber	0.129	0.137	0.114	0.121	0.122	0.117	0.089
Bleached Bristols	0.300	0.292	0.274	0.288	0.280	0.298	0.285
Packaging and Ind. Conv. Papers	1.625	1.550	1.427	1.373	1.300	1.252	1.210
Unbleached Kraft	1.046	0.987	0.896	0.848	0.759	0.710	0.679
Other	0.578	0.563	0.531	0.525	0.541	0.542	0.531
Tissue	1.459	1.409	1.376	1.383	1.384	1.368	1.393
Total Paperboard	8.936	9.001	8.455	8.753	9.002	8.792	8.684
Unbleach Kraft	4.236	4.332	4.032	4.173	4.337	4.215	4.180
Semichemical	1.405	1.463	1.372	1.418	1.424	1.412	1.377
Bleached Board	1.031	1.009	0.952	0.979	0.985	0.967	0.930
Recycled	2.264	2.196	2.099	2.186	2.257	2.198	2.197
Construction and Other	0.674	0.635	0.566	0.496	0.466	0.438	0.419
Total All Grades	21.874	22.075	21.055	21.435	21.826	21.450	20.827
Paper and Products	12.208	12.466	12.144	12.295	12.441	12.271	11.801
Paperboard and Products	8.821	8.873	8.330	8.660	8.806	8.562	8.441
Total Including Products	21.703	21.973	21.040	21.451	21.713	21.271	20.661

R - Revised P - Preliminary E - Estimated by API

TABLE IX

UNITED STATES CAPACITY TO PRODUCE PAPER AND BOARD

1977 - 1992

(THOUSANDS OF TONS)

	1977	1978	1979	1980	1981	1982	1983	1984
TOTAL PAPER AND BOARD	66,461	67,392	69,068	70,699	72,257	73,118	74,018	75,942
Total Paper	29,833	30,434	31,213	32,643	33,707	34,665	35,675	37,104
Newsprint #	4,069	4,104	4,199	4,836	5,457	5,654	5,774	5,851
Total Printing, Writing & Related	14,977	15,566	16,058	16,798	17,301	17,809	18,633	19,889
Groundwood Uncoated #	1,367	1,453	1,541	1,624	1,625	1,655	1,710	1,704
Coated Papers - Total	4,397	4,546	4,822	4,984	5,292	5,516	5,995	6,557
Coated Groundwood	2,408	2,450	2,554	2,762	3,047	3,242	3,522	3,766
Coated Free Sheet	1,989	2,096	2,268	2,222	2,245	2,274	2,473	2,791
Uncoated Free Sheet	7,465	7,847	8,152	8,645	8,828	9,039	9,354	10,058
Cotton Fiber	133	131	134	139	147	161	162	181
Thin	402	395	393	382	374	369	347	338
Solid Bleached Bristols	1,213	1,194	1,016	1,024	1,035	1,069	1,065	1,051
Total Packaging & Ind. Conv.	6,242	6,120	6,086	6,055	5,914	6,077	6,078	6,088
Unbleached Kraft	4,317	4,223	4,098	4,110	3,961	4,091	4,065	3,972
Bleached Pkg. & Ind. Conv.	1,069	1,041	1,105	1,095	1,083	1,080	1,119	1,148
Specialty Pkg.	N.A.	N.A.	N.A.	N.A.	554	553	569	599
Bleached Pkg.	N.A.	N.A.	N.A.	N.A.	529	527	550	549
Special Industrial	856	856	883	850	870	906	894	968
Tissue	4,545	4,644	4,870	4,954	5,035	5,125	5,190	5,276
Total Paperboard	32,172	32,631	33,436	33,709	34,467	35,421	35,452	35,992
Total Unbleached Kraft Packaging & Industrial Converting	14,792	15,054	15,546	15,967	16,738	17,401	17,510	17,834
Linerboard	13,586	13,864	14,199	14,568	15,372	16,032	16,217	16,565
Folding Boxboard	645	650	827	852	799	860	800	792
Other	561	540	520	529	567	509	493	477
Total Bleached								
Packaging Paperboard	4,021	4,196	4,268	4,181	4,141	4,123	4,130	4,185
Folding Boxboard	1,930	1,996	2,061	1,954	1,966	1,988	1,992	2,095
Milk Carton & Food Service	1,824	1,899	1,877	1,865	1,839	1,812	1,812	1,771
Linerboard	97	122	137	116	106	104	111	119
Other	170	179	193	246	230	219	215	200
Semichemical Paperboard	4,661	4,739	4,864	4,946	4,968	5,207	5,119	5,252
Total Recycled Paperboard	8,698	8,642	8,758	8,815	8,800	8,890	8,693	8,721
Linerboard	392	361	432	509	463	379	395	393
Corrugating Medium	1,337	1,343	1,392	1,330	1,349	1,476	1,427	1,524
Container Chip & Filler	403	311	287	283	309	273	247	228
Folding	2,674	2,568	2,615	2,593	2,633	2,676	2,671	2,628
Set-up	443	418	404	349	335	331	324	296
Gypsum Wall Board Facing	1,112	1,238	1,273	1,238	1,251	1,255	1,217	1,249
Other	2,337	2,403	2,355	2,313	2,260	2,298	2,412	2,405
Total Paper and Paperboard	62,005	63,065	64,649	66,352	68,174	70,086	71,127	73,096
Total Wet Machine Board	180	145	154	163	157	160	173	170
Total Construction Paper & Board	4,276	4,182	4,265	4,184	3,926	2,872	2,718	2,676
Construction Paper	2,364	2,352	2,380	2,345	2,111	1,306	1,234	1,227
Insulating Board	1,912	1,830	1,885	1,839	1,815	1,566	1,484	1,449
Total Hard Pressed Board ###	2,536 ##	2,556 ##	2,556 ##	2,556	N.A.	N.A.	N.A.	N.A.

SOURCE; American Paper Institute, Paper Paperboard and Wood Pulp Capacity Survey, various issues to December 1989.

\# - Not directly comparable with shipments data in Table II in 1972-1977 because of redefinition of certain grades from uncoated groundwood paper to newsprint.

- As reported in 1976 Capacity Survey.

N.A. - Not Available

- Hard pressed Board not included in Total Paper and Board.

TABLE IX (Cont.)

UNITED STATES CAPACITY TO PRODUCE PAPER AND BOARD

1977 - 1992

(THOUSANDS OF TONS)

	1985	1986	1987	1988R	1989F	1990F	1991F	1992F
TOTAL PAPER AND BOARD	76,622	77,922	80,341	82,662	84,583	87,148	90,336	93,238
Total Paper	37,581	38,013	39,081	40,211	41,326	42,648	44,339	45,602
Newsprint #	5,788	5,804	6,006	6,115	6,280	6,808	7,123	7,281
Total Printing, Writing & Related	20,462	20,980	22,078	23,027	23,812	24,393	25,490	26,460
Groundwood Uncoated #	1,710	1,685	1,653	1,735	1,846	1,808	1,877	1,905
Coated Papers - Total	6,665	6,743	7,365	7,783	8,142	8,499	8,903	9,403
Coated Groundwood	3,820	3,799	4,136	4,347	4,467	4,607	4,621	4,668
Coated Free Sheet	2,845	2,944	3,229	3,436	3,675	3,892	4,282	4,735
Uncoated Free Sheet	10,515	11,023	11,493	11,853	12,149	12,403	13,022	13,463
Cotton Fiber	187	192	198	203	205	210	212	212
Thin	326	312	290	282	287	288	288	289
Solid Bleached Bristols	1,059	1,025	1,079	1,171	1,183	1,185	1,188	1,188
Total Packaging & Ind. Conv.	5,986	5,757	5,492	5,402	5,472	5,475	5,599	5,658
Unbleached Kraft	3,808	3,579	3,295	2,908	2,854	2,871	2,889	2,905
Bleached Pkg. & Ind. Conv.	1,104	1,092	1,066	1,077	1,123	1,089	1,151	1,166
Specialty Pkg.	519	554	565	638	657	660	709	722
Bleached Pkg.	585	538	501	439	466	429	442	444
Special Industrial	1,074	1,086	1,131	1,417	1,495	1,515	1,559	1,587
Tissue	5,345	5,472	5,505	5,667	5,762	5,972	6,127	6,203
Total Paperboard	36,720	37,765	39,106	40,321	41,118	42,352	43,838	45,476
Total Unbleached Kraft Packaging & Industrial Converting	18,144	18,622	19,422	20,269	20,867	21,482	22,408	23,249
Linerboard	16,739	17,175	17,949	18,705	19,195	19,781	20,543	21,280
Folding Boxboard	905	946	1,000	1,055	1,151	1,180	1,344	1,448
Other	500	501	473	509	521	521	521	521
Total Bleached Packaging Paperboard	4,370	4,577	4,734	4,732	4,723	4,838	5,051	5,203
Folding Boxboard	2,223	2,341	2,364	2,323	2,293	2,380	2,508	2,634
Milk Carton & Food Service	1,843	1,926	2,031	2,017	2,006	2,023	2,108	2,132
Linerboard	131	135	148	170	185	195	197	197
Other	173	175	191	222	239	240	240	240
Semichemical Paperboard	5,411	5,557	5,682	5,788	5,917	6,003	6,010	6,220
Total Recycled Paperboard	8,795	9,009	9,268	9,532	9,611	10,029	10,389	10,804
Linerboard	422	467	515	494	455	558	794	1,169
Corrugating Medium	1,523	1,580	1,685	1,947	2,040	2,197	2,236	2,270
Container Chip & Filler	53 #	42	40	35	36	36	36	36
Folding	2,640	2,662	2,661	2,601	2,556	2,634	2,668	2,680
Set-up	289	272	275	288	301	305	308	310
Gypsum Wall Board Facing	1,265	1,349	1,386	1,411	1,405	1,405	1,405	1,405
Other	2,603 #	2,637	2,706	2,756	2,816	2,894	2,922	2,934
Total Paper and Paperboard	74,301	75,778	78,187	80,532	82,444	85,000	88,177	91,078
Total Wet Machine Board	160	154	153	121	121	121	121	121
Total Construction Paper & Board	2,161	1,990	2,001	2,009	2,018	2,027	2,038	2,039
Construction Paper	937	834	822	830	832	841	852	853
Insulating Board	1,224	1,156	1,179	1,179	1,186	1,186	1,186	1,186

SOURCE: American Paper Institute, Paper, Paperboard and Wood Pulp Capacity Survey, various issues to December 1989.

F - Forecast as reported in December 1989 Capacity Survey

N.A. - Not Available # - Reflects shift of 160,000 tons of non-containerboard grade to "other" recycled paperboard.

TABLE X

WOOD PULP CAPACITY

1977 - 1992

(Thousands of Tons)

	1977	1978	1979	1980	1981	1982	1983	1984
TOTAL ALL GRADES (1)	51,848	52,715	53,636	55,212	56,830	57,639	57,591	59,000
TOTAL EXCLUDING CONSTRUCTION	49,909	50,789	51,636	53,213	54,890	56,126	56,144	57,742
Dissolving and Special Alpha	1,648	1,573	1,551	1,590	1,598	1,606	1,525	1,487
Chemical Paper Grades	39,174	39,998	40,896	41,892	43,143	43,972	44,285	45,479
Sulfite, Paper Grades Total	2,252	2,095	2,004	1,909	1,855	1,780	1,789	1,750
Bleached	1,812	1,675	1,595	1,512	1,464	1,383	1,404	1,445
Unbleached	440	420	409	397	391	397	385	305
Sulfate and Soda Total	36,922	37,903	38,892	39,983	41,288	42,192	42,496	43,729
Bleached Total	15,822	18,171	18,969	19,695	20,316	20,757	21,290	22,357
Hardwood	7,310	7,729	8,072	8,356	8,559	8,705	9,179	9,867
Softwood	8,512	10,442	10,897	11,339	11,757	12,052	12,111	12,490
Semi-Bleached Total	1,548	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Hardwood	12							
Softwood	1,536							
Unbleached	19,552	19,732	19,923	20,288	20,972	21,435	21,206	21,372
Semichemical Total	4,514	4,573	4,553	4,601	4,597	4,734	4,489	4,625
Bleached	345	339	336	384	350	356	367	381
Unbleached	4,169	4,234	4,217	4,217	4,247	4,378	4,122	4,244
Mechanical Total (Groundwood)	6,441	6,506	6,573	7,068	7,434	7,293	7,261	7,380
For Paper and Board	4,502	4,580	4,573	5,069	5,494	5,780	5,814	6,122
Stone Groundwood	3,397	3,328	3,255	3,212	3,239	3,260	3,146	3,168
Refiner	538	533	507	486	489	472	480	501
Thermo-Mechanical	567	719	811	1,371	1,766	2,048	2,188	2,453
For Other Paper and Board	1,939	1,926	2,000	1,999	1,940	1,513	1,447	1,258
Stone and Refiner	525	529	594	647	651	628	576	469
Defibrated and Exploded	1,414	1,397	1,406	1,352	1,289	885	871	789
Screenings	71	65	63	61	58	34	31	29
MARKET PULP								
Total All Grades	5,467	5,746	6,334	6,802	6,971	7,080	7,414	7,530
Dissolving	1,611	1,573	1,551	1,576	1,579	1,598	1,519	1,487
Chemical Paper Grades	3,745	4,069	4,682	5,130	5,375	5,470	5,881	6,029
Sulfate	3,444	3,760	4,332	4,761	5,034	5,182	5,529	5,727
Bleached and Semi-Bleached	3,280	3,653	4,228	4,589	4,867	5,040	5,372	5,582
Unbleached	164	107	104	172	167	142	157	145
Sulfite	301	309	350	369	341	288	352	302
All Other	111	104	101	96	17	12	14	14
(1) Excludes defribrated and exploded wood pulp for hard pressed board as follows:	2,500	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

(2) Semi-Bleached Total included with Bleached.

N.A. - Not Available

TABLE X (Cont.)

WOOD PULP CAPACITY

1977 - 1992

(Thousands of Tons)

	1985	1986	1987	1988R	1989F	1990F	1991F	1992F
TOTAL ALL GRADES (1)	59,615	60,686	62,077	63,756	65,078	66,840	69,130	70,691
TOTAL EXCLUDING CONSTRUCTION	58,641	59,750	61,173	62,951	64,287	66,047	68,335	69,895
Dissovling and Special Alpha	1,454	1,399	1,389	1,450	1,495	1,495	1,495	1,495
Chemical Paper Grades	46,544	47,655	48,825	50,278	51,291	52,518	54,510	56,004
Sulfite, Paper Grades Total	1,738	1,703	1,646	1,627	1,619	1,622	1,622	1,622
Bleached	1,482	1,502	1,460	1,442	1,430	1,433	1,433	1,433
Unbleached	256	201	186	185	189	189	189	189
Sulfate and Soda Total	44,806	45,952	47,179	48,651	49,672	50,896	52,888	54,382
Bleached and Semi-Bleached Total	23,624	24,571	25,446	26,506	27,191	27,876	29,217	30,502
Hardwood	10,750	11,402	11,823	12,450	12,844	13,202	13,953	14,538
Softwood	12,874	13,169	13,623	14,056	14,347	14,674	15,264	15,964
Unbleached	21,182	21,381	21,733	22,145	22,481	23,020	23,671	23,880
Semichemical Total	4,650	4,631	4,697	4,788	4,865	4,925	4,963	4,966
Bleached	395	404	408	369	370	370	370	370
Unbleached	4,255	4,227	4,289	4,419	4,495	4,555	4,593	4,596
Mechanical Total (Groundwood)	6,938	6,994	7,160	7,236	7,423	7,898	8,158	8,222
For Paper and Board	5,964	6,058	6,256	6,431	6,632	7,105	7,363	7,426
Stone Groundwood	3,006	2,996	2,942	2,986	3,047	3,241	3,283	3,292
Refiner	459	402	348	345	354	342	330	330
Thermo-Mechanical	2,499	2,660	2,966	3,100	3,231	3,522	3,750	3,804
For Other Paper and Board	974	936	904	805	791	793	795	796
Stone and Refiner	269	269	275	222	222	222	222	222
Defibrated and Exploded	705	667	629	583	569	571	573	574
Screenings	29	7	6	4	4	4	4	4
MARKET PULP								
Total All Grades	7,989	8,039	8,505	8,908	9,092	9,336	9,411	10,383
Dissolving	1,446	1,395	1,388	1,450	1,495	1,495	1,402	1,495
Chemical Paper Grades	6,529	6,630	7,103	7,451	7,593	7,827	7,988	8,860
Sulfate	6,227	6,343	6,819	7,178	7,341	7,575	7,703	8,608
Bleached and Semi-Bleached	6,083	6,198	6,651	6,991	7,151	7,385	7,523	8,418
Unbleached	144	145	168	187	190	190	180	190
Sulfite	302	287	284	273	252	252	285	252
All Other	14	14	14	7	4	14	21	28

F - Forecast

TABLE XI

IMPORTS

WOOD PULP, PAPER, PAPERBOARD AND PRODUCTS

1984 - 1989

	1984		1985		1986	
	Tons	$ 000	Tons	$ 000	Tons	$ 000
TOTAL ALL GRADES	15,675,105	7,375,991	16,074,779	7,457,128	16,617,526	7,860,746
WOOD PULP, ALL GRADES, TOTAL	4,490,081	1,844,766	4,465,746	1,520,907	4,581,760	1,601,378
Dissolving and Special Alpha	161,066	62,186	175,011	58,956	254,699	87,725
Sulphite, Paper Grades, Total	459,810	190,689	424,510	159,609	482,205	168,299
Bleached	395,547	165,435	313,592	125,268	350,520	129,490
Unbleached	64,263	25,254	110,918	34,341	131,685	38,809
Sulphate, Paper Grades, Total	3,562,732	1,501,513	3,679,000	1,251,781	3,737,348	1,312,408
Bleached	3,383,516	1,433,377	3,496,344	1,193,242	3,570,693	1,256,971
Semi-Bleached	46,277	20,601	57,248	19,542	54,385	20,645
Unbleached	132,939	47,535	125,408	38,997	112,270	34,792
Soda	**	**	**	**	**	**
Groundwood	257,543	70,360	111,501	28,662	51,921	13,010
Other*	48,930	20,018	75,724	21,899	55,587	19,936
WASTE PAPER	109,712	11,692	87,413	10,160	99,313	11,182
PAPER, PAPERBOARD AND PRODUCTS, TOTAL	11,075,312	5,323,796	11,521,620	5,697,842	11,936,453	6,035,848
PAPER, PAPERBOARD AND OTHER, TOTAL	10,855,990	4,782,630	11,238,094	5,074,513	11,546,546	5,247,127
PAPER, TOTAL#	10,113,718	4,592,641	10,637,427	4,906,913	10,925,453	5,051,916
Newsprint	7,893,877	3,299,570	8,496,568	3,638,716	8,587,507	3,682,351
Printing & Writing Paper, Total	2,044,045	1,170,144	1,912,867	1,116,255	2,029,303	1,179,802
Groundwood, Uncoated	1,090,049	548,791	1,027,211	530,619	1,028,231	531,149
Coated and Impregnated Paper	428,274	295,844	496,072	363,885	501,382	359,495
Uncoated Free Sheet	478,628	285,212	364,848	198,432	453,639	254,627
Uncoated Book	254,926	156,296	200,927	106,586	223,798	126,278
Writing Papers	223,702	128,916	163,921	91,846	229,841	128,349
Other Fine Paper	-	-	-	-	-	-
Thin Paper	46,427	39,513	23,712	22,276	45,351	33,831
Bristols	667	784	1,024	1,043	700	700
Packaging & Industrial Paper, Total	145,484	102,565	172,002	116,391	242,570	146,211
Unbleached Kraft	42,854	19,568	63,604	23,976	115,008	42,650
Other Packaging & Converting	83,860	53,927	85,052	56,429	101,841	63,002
Glassine & Greaseproof	11,659	16,506	15,027	20,881	15,158	20,822
Vegetable Parchment	696	1,000	1,165	1,700	1,412	2,000
Special Industrial Paper	6,415	11,564	7,154	13,405	9,151	17,737
Non-Kraft Wrapping	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Tissue Paper	30,312	20,362	55,990	35,551	66,073	43,552
PAPERBOARD, TOTAL	242,616	73,892	184,201	55,875	281,449	87,818
Test or Containerboard	70,028	22,218	50,975	16,848	78,063	25,596
Semichemical Corrugating	103,968	26,098	65,203	13,706	99,062	22,092
Other Paperboard	68,620	25,576	68,023	25,321	104,324	40,130
WET MACHINE BOARD	2,826	2,017	3,270	2,585	3,235	2,525
CONSTRUCTION PAPER & BOARD, TOTAL	496,830	114,080	413,196	109,140	336,409	104,868
Building Paper	388,790	77,075	289,195	68,691	202,336	59,639
Insulating and Other Building Board	108,040	37,005	124,001	40,449	134,073	45,229
PAPER AND PAPERBOARD PRODUCTS, TOTAL#	219,322	541,166	283,526	623,329	389,907	788,721
PAPER PRODUCTS, TOTAL#	184,522	472,998	258,934	572,325	361,517	730,257
Printing & Book Paper#	36,947	152,006	37,226	148,241	49,474	198,654
Writing & Related Paper	118,865	275,709	154,727	340,143	203,200	416,344
Special Industrial Paper	12,964	28,709	16,773	36,407	40,243	53,154
Tissue Paper	15,746	16,574	50,208	47,534	68,600	62,105
PAPERBOARD PRODUCTS, TOTAL	34,800	68,168	24,592	51,004	28,390	58,464

* Includes Mixtures and Screenings ** Included with Sulphate Pulp Imports

Coated and Impregnated Printing Papers included in Primary Coated Papers from 1977 on, in earlier years they were in Paper Products.

NOTE: Dollar figures for the value of shipments for which no tonnage figures were given are shown below. They are not included in the subtotals, but are in the Total All grades: ($ 000) $195,737 $228,219 $212,338

TABLE XI (Cont'd)

IMPORTS

WOOD PULP, PAPER, PAPERBOARD AND PRODUCTS

1984-1989

	1987		1988		1989	
	Tons	$000	Tons	$000	Tons	$000
TOTAL ALL GRADES	17,814,681	9,016,321	18,309,754	10,692,833	18,276,870	11,343,301
WOOD PULP, ALL GRADES, TOTAL	4,850,238	2,069,394	5,038,158	2,663,424	5,004,366	2,980,197
Dissolving and Special Alpha	197,531	80,701	248,456	131,587	284,072	183,680
Sulphite, Paper Grades, Total	508,560	203,891	385,081	201,455	397,849	239,464
Bleached	352,543	158,234	331,899	179,673	358,284	218,859
Unbleached	156,017	45,657	53,182	21,782	39,565	20,605
Sulphate, Paper Grades, Total	3,947,335	1,718,792	4,033,856	2,198,263	3,971,850	2,427,698
Bleached	3,795,005	1,656,510	3,859,586	2,110,794	3,753,249	2,303,180
Semi-Bleached	56,973	24,804	66,930	35,456	131,816	79,753
Unbleached	95,357	37,478	107,340	52,013	86,785	44,765
Soda	**	**	**	**	**	**
Groundwood	92,558	28,532	237,971	78,777	181,049	63,939
Other *	108,254	37,478	132,794	53,342	169,546	65,416
WASTE PAPER	127,398	19,231	161,367	27,361	172,575	33,197
PAPER, PAPERBOARD AND PRODUCTS, TOTAL	12,837,045	5,927,696	13,110,229	8,002,048	13,099,929	8,329,907
PAPER, PAPERBOARD AND OTHER, TOTAL	12,435,486	5,995,122	12,727,246	7,038,168	12,537,471	7,231,649
PAPER, TOTAL#	11,765,207	5,768,703	12,063,790	6,799,044	11,814,260	6,900,798
Newsprint	8,986,548	4,121,327	8,801,503	4,569,853	8,553,401	4,379,613
Printing & Writing Paper, Total	2,410,217	1,412,458	2,859,529	1,948,907	2,732,976	1,996,140
Groundwood, Uncoated	1,269,774	654,767	1,362,642	792,881	1,304,114	817,785
Coated and Impregnated Paper	674,531	467,865	797,765	641,466	774,022	632,484
Uncoated Free Sheet	417,395	249,943	591,829	414,326	583,077	462,404
Uncoated Book	210,624	119,775	258,146	175,746	N.L.R.	N.L.R.
Writing Papers	206,771	130,168	333,683	238,580	583,077	462,404
Other Fine Paper	-	-	-	-	-	-
Thin Paper	47,567	38,831	55,774	48,804	12,711	15,200
Bristols	950	1,052	51,519	51,430	59,052	68,267
Packaging & Industrial Paper, Total	310,321	191,619	343,197	231,796	407,086	414,354
Unbleached Kraft	168,420	69,828	161,708	76,116	239,303	116,011
Other Packaging & Converting	107,904	65,428	146,120	94,119	19,012	18,675
Glassine & Greaseproof	21,130	31,230	22,601	34,611	20,147	31,828
Vegetable Parchment	1,488	2,398	1,611	2,941	1,695	3,167
Special Industrial Paper	11,379	22,735	11,157	24,009	126,088	243,395
Non-Kraft Wrapping	N.A.	N.A.	N.A.	N.A.	841	1,278
Tissue Paper	58,121	43,299	59,561	48,488	120,797	110,691
PAPERBOARD, TOTAL	360,831	127,461	341,011	130,713	533,486	280,447
Test or Containerboard	80,981	29,352	85,682	36,145	85,048	34,401
Semichemical Corrugating	128,636	33,898	142,490	43,596	118,176	36,462
Other Paperboard	151,214	64,211	112,839	50,972	330,262	209,584
WET MACHINE BOARD	3,463	2,638	4,239	3,780	606	580
CONSTRUCTION PAPER & BOARD, TOTAL	305,985	96,320	318,206	104,631	189,119	49,824
Building Paper	198,783	56,532	192,498	49,454	189,119	49,824
Insulating and Other Building Board	107,202	39,788	125,708	55,177	***	***
PAPER AND PAPERBOARD PRODUCTS, TOTAL#	401,559	932,574	382,983	963,880	562,458	1,098,258
PAPER PRODUCTS, TOTAL#	368,179	866,121	345,817	895,813	470,472	924,729
Printing & Book Paper#	55,943	248,208	51,134	247,337	47,246	224,696
Writing & Related Paper	234,725	508,182	241,695	557,631	93,996	206,444
Special Industrial Paper	22,952	55,886	16,415	47,886	197,876	190,429
Tissue Paper	54,559	53,845	36,573	42,958	131,354	303,160
PAPERBOARD PRODUCTS, TOTAL	33,380	66,453	37,166	68,067	91,986	173,529

* Includes Mixtures and Screenings ** Included with Sulphate Pulp Imports *** Transferred to SIC 24. N.L.R. - No Longer Reported
# Coated and Impregnated Printing Papers included in Primary Coated Papers from 1977 on, in earlier years they were in Paper Products.
NOTE: Dollar figures for the value of shipments for which no tonnage figures were given are shown below. They are not included in the subtotals, but are in the Total All grades: ($ 000) $201,453 $177,686 $136,624

Chart 7

U.S. IMPORTS EXCLUDING NEWSPRINT

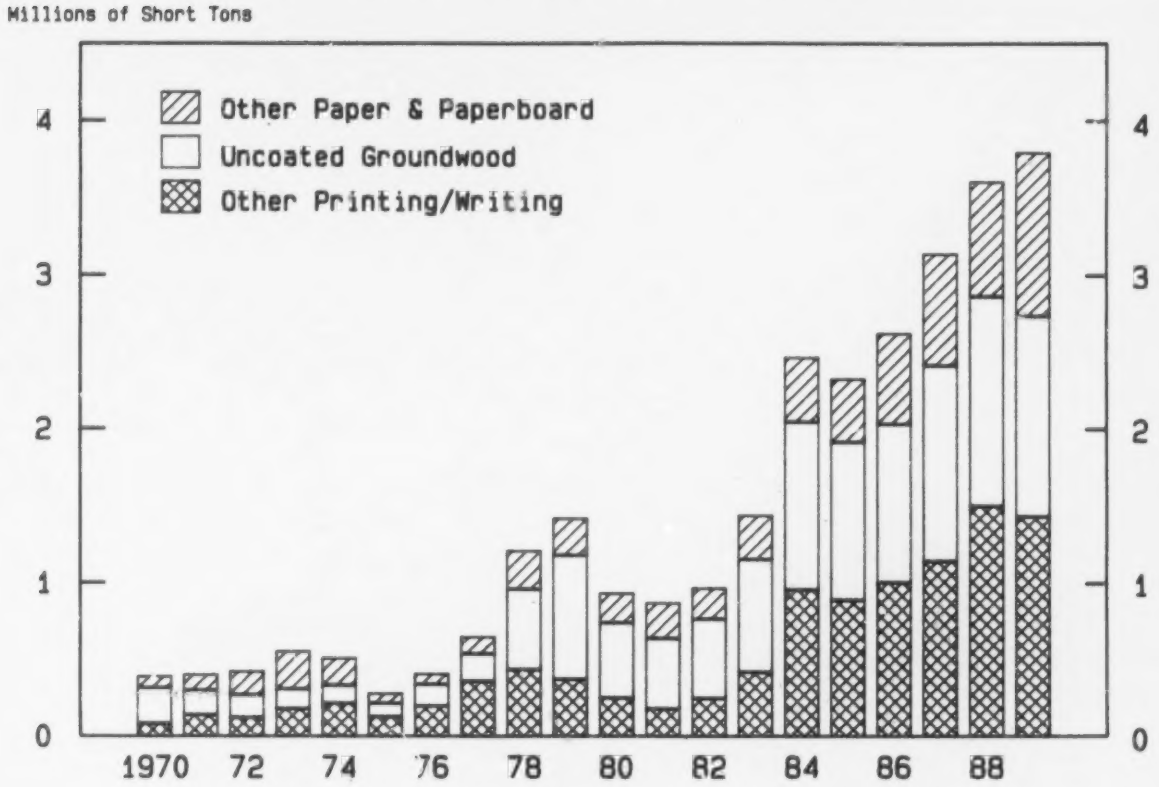


Chart 8

U.S. EXPORTS OF PAPER AND PAPERBOARD

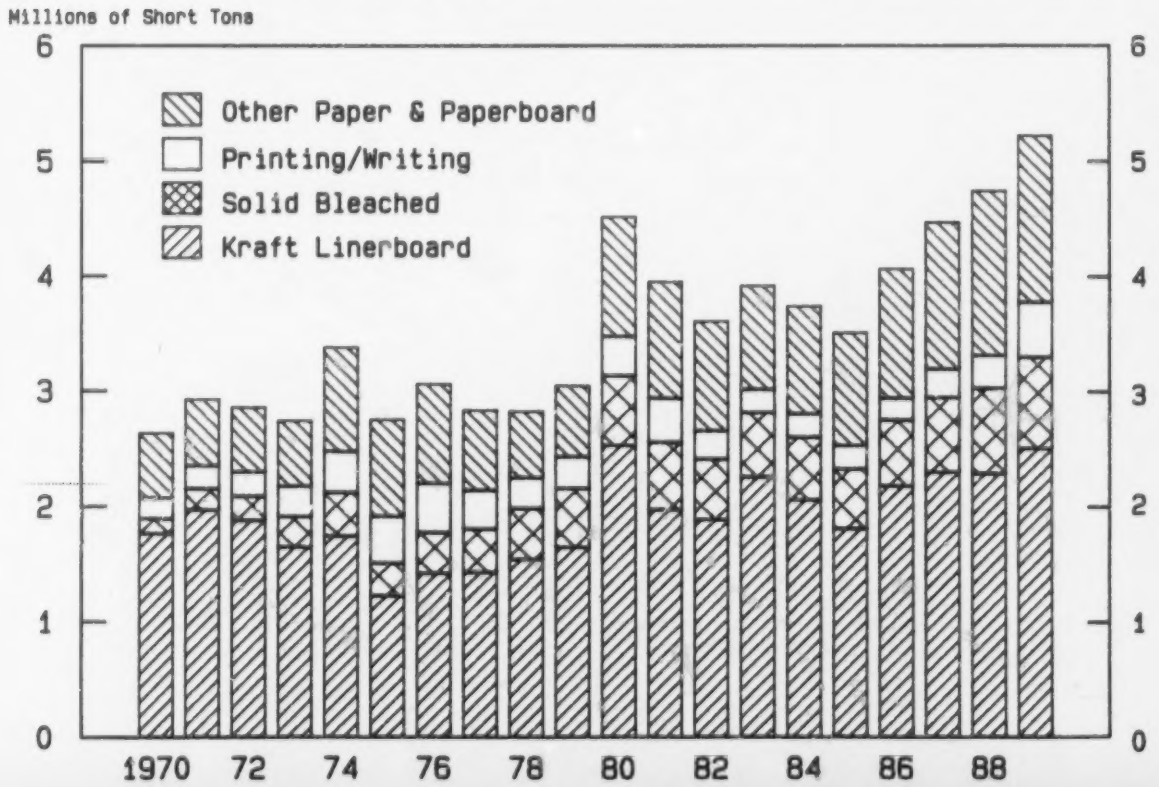


Chart 9

U.S. EXPORTS OF TOTAL PAPER & TOTAL PAPERBOARD

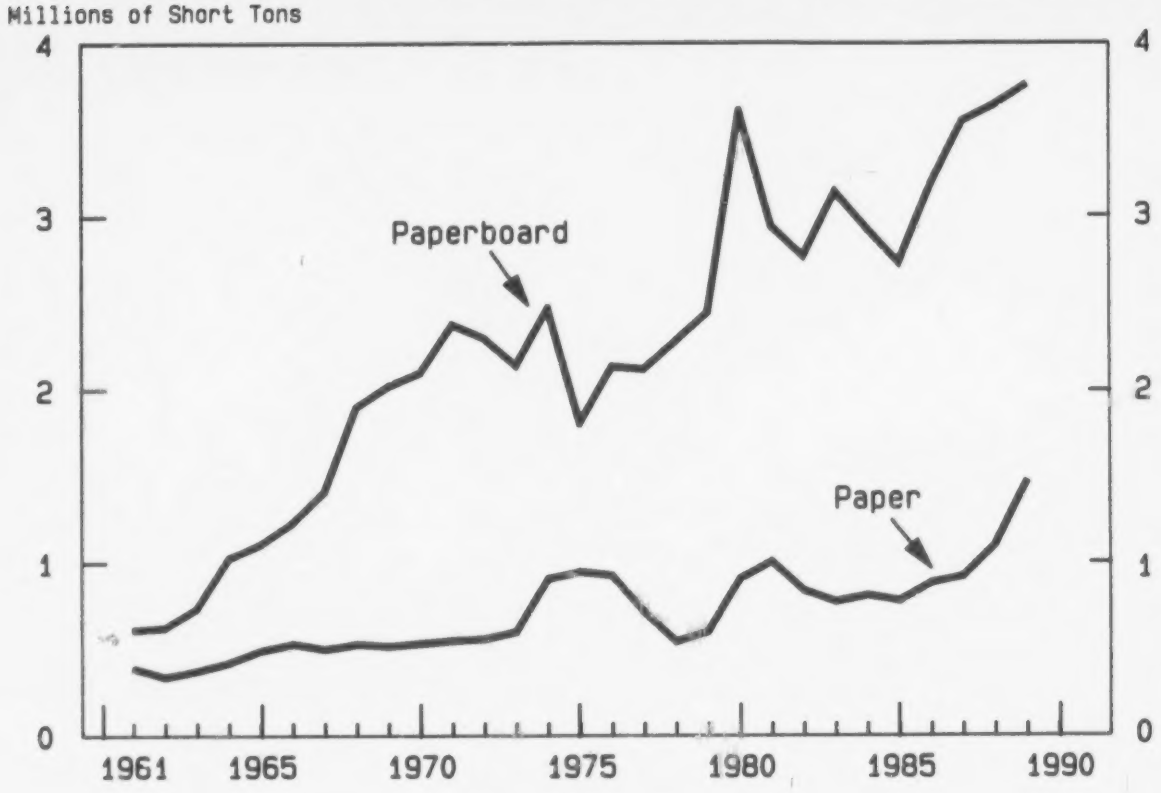


Chart 10

U.S. EXPORTS OF TOTAL WOOD PULP AND WASTE PAPER

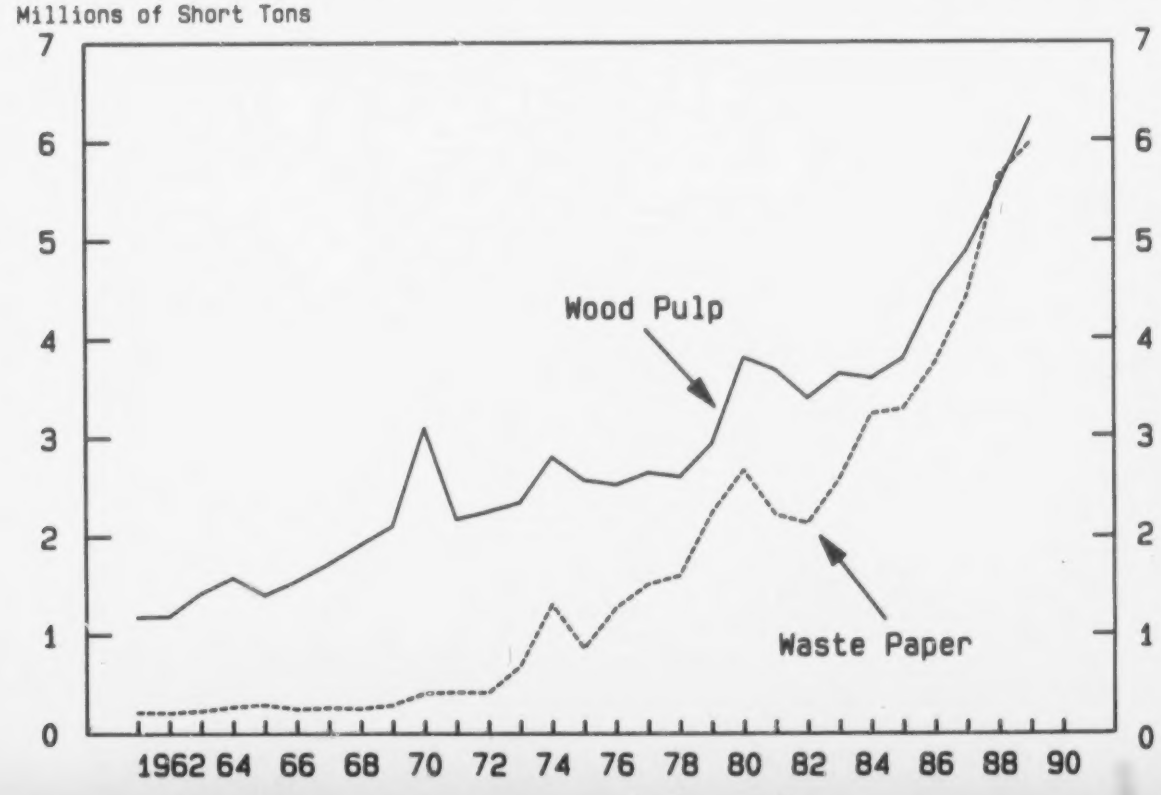


TABLE XII

EXPORTS

1984 - 1989

WOOD PULP, PAPER, PAPERBOARD AND PRODUCTS

	1984		1985		1986	
	Tons	$ 000	Tons	$ 000	Tons	$ 000
TOTAL ALL GRADES	11,301,140	4,525,172	11,259,709	4,041,197	13,051,329	4,685,586
WOOD PULP ALL GRADES, TOTAL	3,593,585	1,501,948	3,795,102	1,353,758	4,458,317	1,662,465
Dissolving and Special Alpha	594,963	304,295	630,862	299,186	711,086	339,148
Sulphite, Paper Grades, Total	273,805	111,055	272,288	93,216	343,943	110,831
Bleached	263,416	107,797	250,047	87,873	317,493	104,110
Unbleached	10,389	3,258	22,241	5,343	26,450	6,721
Sulphate, Paper Grades, Total	2,670,794	1,064,664	2,862,933	951,684	3,344,619	1,197,590
Bleached	2,504,038	1,010,851	2,727,183	914,977	3,181,631	1,151,427
Semi-Bleached	75,937	25,697	40,543	13,150	18,781	6,388
Unbleached	90,819	28,116	95,207	23,557	144,207	39,775
Mechanical, Semi-Chemical & Other	54,023	21,934	29,019	9,672	58,669	14,896
COTTON PULP & OTHER FIBER	84,883	63,545	107,224	71,802	157,452	72,500
WASTE PAPER	3,235,441	408,128	3,285,926	349,258	3,748,711	411,076
PAPER, PAPERBOARD AND PRODUCTS, TOTAL	4,387,231	2,551,551	4,071,457	2,266,379	4,686,849	2,539,545
PAPER, PAPERBOARD AND OTHER, TOTAL	3,819,216	1,789,512	3,580,547	1,586,235	4,160,284	1,853,748
PAPER, TOTAL	810,933	632,493	779,000	594,337	883,768	642,728
Newsprint	306,198	133,964	314,385	131,379	392,232	194,550
Printing & Writing Paper, Total	203,525	219,925	202,826	201,844	190,677	185,275
Uncoated Groundwood	30,405	28,875	36,779	31,727	40,850	28,947
Coated Printing and Converting	85,715	71,368	82,461	64,623	78,253	57,858
Coated Groundwood	44,376	36,133	36,444	31,922	36,388	28,356
Coated Book	41,339	35,235	46,017	32,701	41,865	29,502
Uncoated Free Sheet	65,410	87,255	64,573	79,015	50,148	71,355
Thin (ex. cigarette)	14,036	20,705	13,338	17,603	14,533	19,167
Cotton Fiber	4,983	8,247	4,286	7,493	4,479	5,843
Bristols	2,976	3,475	1,389	1,383	2,414	2,105
Packaging & Industrial Paper, Total	284,201	259,323	243,671	242,909	284,098	241,551
Unbl. Kraft Pkg & Ind.Conv., Total	106,712	44,382	67,695	29,931	78,250	32,011
Unbleached Kraft exc. Ship. Sack	40,434	19,155	29,032	15,595	20,883	11,343
Shipping Sack	66,278	25,227	38,663	14,336	57,367	20,668
Glassine, Greaseproof & Veg. Pa	5,444	8,845	6,189	9,597	3,976	9,482
Other Pkg. & Industrial Converting	26,148	22,693	31,917	22,347	36,435	26,495
Special Industrial, Total	145,897	183,403	137,870	181,034	165,437	173,563
Special Industrial	136,924	162,043	129,565	162,808	157,274	157,126
Absorbent	8,973	21,360	8,305	18,226	8,163	16,437
Tissue Paper	17,009	19,281	18,118	18,205	16,761	21,352
PAPERBOARD TOTAL	2,930,611	1,113,047	2,732,738	952,191	3,182,468	1,159,122
Kraft Linerboard (a)	2,058,034	630,691	1,807,151	480,909	2,177,426	635,749
Other Kraft Paperboard (Unbleached)	110,878	51,270	100,651	41,053	157,615	57,547
Corrugating Medium Semichemical	49,612	12,220	61,853	15,293	76,643	21,712
Bleached Packaging Paperboard, Total	543,221	346,439	517,519	333,103	571,304	359,957
Milk Carton	348,816	227,899	378,814	244,935	417,029	264,142
Folding Boxboard	106,450	68,074	110,721	67,578	119,999	72,479
Plate, Dish, Tray & Cup	42,180	25,718	9,896	7,104	14,703	9,596
Other	45,775	24,748	18,088	13,486	19,573	13,740
Recycled Furnish Paperboard, Total	168,866	72,427	245,564	81,833	199,480	84,157
Boxboard & Related Boards	5,387	3,334	56,213	30,232	10,218	5,008
Special Paperboard	123,368	59,001	124,136	35,015	134,826	64,206
Containerboard	40,111	10,092	65,215	16,586	54,436	14,943
WET MACHINE BOARD	13,782	7,335	13,380	6,930	18,895	7,258
CONSTRUCTION PAPER $ BOARD, TOTAL	63,890	36,637	55,429	32,777	75,153	44,640
Building Paper	26,498	17,765	21,671	13,344	25,935	15,905
Insulating & Other Building Board	37,392	18,872	33,758	19,433	49,218	28,735
PAPER AND PAPERBOARD PRODUCTS, TOTAL	568,015	762,039	490,910	680,144	526,565	685,797
PAPER PRODUCTS, TOTAL	286,461	516,155	237,191	464,174	240,221	456,434
Cig. Paper Cut to Size, Books, etc.	15,830	42,808	14,939	39,710	15,416	37,718
PAPERBOARD PRODUCTS, TOTAL	281,554	245,884	253,719	215,970	286,344	229,363

NOTE: Dollar figures for the value of shipments for which no tonnage figures were given are shown below. They are not included in the sub-totals, but are in the Total, All Grades: ($ 000) **$8,843** **$6,618** **$7,298**

TABLE XII (Cont.)

EXPORTS

1984 - 1989

WOOD PULP, PAPER, PAPERBOARD AND PRODUCTS

	1987		1988		1989	
	Tons	$ 000	Tons	$ 000	Tons	$ 000
TOTAL ALL GRADES	14,797,719	6,015,947	17,061,210	7,476,535	18,633,603	8,627,610
WOOD PULP ALL GRADES, TOTAL	4,889,331	2,259,377	5,528,292	2,914,522	6,231,168	3,512,604
Dissolving and Special Alpha	751,825	385,612	864,924	503,610	836,123	571,681
Sulphite, Paper Grades, Total	413,449	165,129	422,273	193,618	449,013	230,575
Bleached	375,020	157,947	392,117	179,384	413,411	222,310
Unbleached	38,429	7,182	30,156	14,234	35,602	8,265
Sulphate, Paper Grades, Total	3,697,621	1,698,130	4,190,314	2,196,460	4,876,237	2,690,692
Bleached	3,531,681	1,635,111	3,990,532	2,107,402	4,677,520	2,618,670
Semi-Bleached	7,747	2,811	25,777	7,099	17,246	7,610
Unbleached	158,193	60,208	174,005	81,959	181,471	64,412
Mechanical, Semi-Chemical & Other	26,436	10,506	50,781	20,834	69,795	19,656
COTTON PULP & OTHER FIBER	182,001	91,365	201,567	111,923	122,045	100,510
WASTE PAPER	4,422,139	553,348	5,640,118	688,258	5,980,620	729,797
PAPER, PAPERBOARD AND PRODUCTS, TOTAL	5,304,248	3,103,820	5,691,233	3,752,662	6,299,770	4,261,034
PAPER, PAPERBOARD AND OTHER, TOTAL	4,579,052	2,280,421	4,876,564	2,701,406	5,259,734	2,982,685
PAPER, TOTAL	921,419	776,226	1,102,489	988,031	1,465,752	1,233,526
Newsprint	339,773	210,093	427,296	295,474	624,798	357,381
Printing & Writing Paper, Total	249,092	242,639	287,207	313,047	478,200	465,168
Uncoated Groundwood	55,841	39,751	70,286	58,639	88,056	64,766
Coated Printing and Converting	100,839	72,144	97,463	79,730	168,538	131,418
Coated Groundwood	39,284	28,592	46,211	39,955	117,002	81,378
Coated Book (1989 Coated Free Sheet)	61,555	43,552	51,252	39,775	51,536	50,040
Uncoated Free Sheet	67,858	99,330	82,660	124,049	122,346	166,830
Cotton Fiber (1989 Inc. in Uncoated Free Sheet)	4,084	6,117	6,026	8,687	695	1,861
Thin (ex. cigarette)	18,409	23,331	28,129	39,532	40,552	56,423
Bristols	2,061	1,966	2,643	2,410	46,721	34,053
Other	N.A.	N.A.	N.A.	N.A.	11,987	11,678
Packaging & Industrial Paper, Total	294,222	292,704	346,718	342,117	342,042	380,790
Unbl. Kraft Pkg & Ind.Conv., Total	89,194	40,758	110,075	54,975	125,818	60,318
Unbleached Kraft exc. Ship. Sack	23,543	15,670	24,429	19,729	30,482	18,856
Shipping Sack	65,651	25,088	85,646	35,246	95,336	41,462
Glassine, Greaseproof & Veg. Parch.	6,182	13,525	32,336	37,146	8,729	7,106
Other Pkg. & Industrial Converting	34,022	23,266	19,723	11,381	62,625	34,616
Special Industrial, Total	164,824	215,155	184,584	238,615	144,870	278,750
Special Industrial	153,086	191,982	173,824	211,450	132,289	256,445
Absorbent	11,738	23,173	10,760	27,165	12,581	22,305
Tissue Paper	38,332	30,790	41,268	37,393	20,712	30,187
PAPERBOARD TOTAL	3,550,281	1,444,974	3,642,199	1,644,315	3,757,705	1,734,402
Kraft Linerboard (a)	2,296,633	812,161	2,281,362	887,846	2,499,716	935,364
Other Kraft Paperboard (Unbleached)	210,566	78,596	292,437	102,638	246,575	113,315
Corrugating Medium Semichemical	63,951	22,938	42,360	18,060	31,162	14,494
Bleached Packaging Paperboard, Total	647,803	407,924	742,919	502,514	795,305	582,978
Milk Carton	452,176	290,326	504,372	337,463	529,237	392,697
Folding Boxboard	150,029	90,190	193,105	133,872	193,818	148,479
Plate, Dish, Tray & Cup	28,332	14,576	26,796	18,289	20,575	16,548
Other	17,266	12,832	18,646	12,890	51,675	25,254
Recycled Furnish Paperboard, Total	331,328	123,355	283,121	133,257	184,947	88,251
Boxboard & Related Boards (c)	6,841	4,095	95,232	46,115	21,783	12,514
Containerboard	86,020	21,820	68,142	28,496	89,098	32,883
Other Paperboard	238,467	97,440	119,747	58,646	74,066	42,854
WET MACHINE BOARD	17,328	7,816	11,691	4,915	2,889	1,256
CONSTRUCTION PAPER & BOARD, TOTAL	90,024	51,405	120,185	64,145	33,388	13,501
Building Paper	33,779	22,491	34,652	24,893	33,388	13,501
Insulating & Other Building Board	56,245	28,914	85,533	39,252	***	***
PAPER AND PAPERBOARD PRODUCTS, TOTAL	725,196	823,399	814,669	1,051,256	1,040,036	1,278,349
PAPER PRODUCTS, TOTAL	301,202	540,681	367,548	682,281	473,435	832,806
Cig. Paper Cut to Size, Books, etc.	17,295	43,497	22,307	59,827	22,808	62,101
PAPERBOARD PRODUCTS, TOTAL	423,994	282,718	447,121	368,975	566,601	445,543

(a) Contains Bleached Kraft Linerboard reported as follows: (Tons) 1984 - 141,368; 1985 - 130,358; 1986 - 133,787; 1987 - 102,266 1988 - 140,801; 1989 - 283,113 (c)-Excludes Recycled Corrugating Medium *** Transferred to SIC 24

NOTE: Dollar figures for the value of shipment for which no tonnage figures were given are shown below. They are not included in the sub-totals, but are in the Total, All Grades: ($ 000) $8,037 $9,170 $23,665

TABLE XIII

VALUE OF SHIPMENTS OF PRODUCT CLASSES
1961 - 1966
(Millions of Dollars)

SIC CODE			1961		1962		1963		1964		1965		1966
26	PAPER AND ALLIED PRODUCTS (1)	$	77,294.4		77,057.2		81,802.8		92,543.9		90,798.9		94,833.2
2611-	Pulp Mill Products		3,971.0		3,644.2		3,624.3		4,183.0		3,629.5		4,186.8
26111	Special Alpha and Dissolving Woodpulp	(	715.1		593.8		589.9		617.6		561.6		587.6
26113	Sulfate Wood Pulp	(			2,510.8		2,479.7		3,125.3		2,626.6		3,139.8
26114	Sulfite and Other Wood Pulp		3,249.8		183.0		209.6		200.4		228.4		211.8
26115	Pulp, Other Than Wood, and Pulpmill Byproducts, N.E.C.				353.0	#	336.0		236.8		208.3		249.3
26110	Pulp Mill Products, N.S.K.		6.0		3.6		9.1		3.8		4.6		0.3
2621-	Papermill Products, except Building Paper		19,936.3		20,056.9		21,361.0		24,354.3		23,631.0	R	24,476.7
26211	Newsprint		2,063.0		2,161.6		2,220.1		2,369.6		2,385.4		2,409.5
26212	Uncoated Groundwood Paper		842.3		841.5		868.6		1,043.8		996.4		942.3
26213	Clay Coated Printing and Converting Papers		3,581.4		3,787.3		4,232.4		5,362.7		5,369.0		5,468.0
26214	Uncoated Free Sheet		5,765.7		5,530.6		5,999.2		6,899.1		6,648.1		7,329.8
26215	Bleached Bristols, Excluding Cotton Fiber Index and Bogus		602.8		605.2		667.6		708.7		673.9		697.4
26216	Cotton Fiber and Thin Paper		736.2		599.3		619.1		762.4		684.9		722.5
26217	Unbleached Kraft Packaging and Industrial Converting Paper		1,444.4		1,199.8		1,219.0		1,349.1		1,101.7		1,125.9
26218	Packaging and Industrial Converting Paper, Except Unbleached Kraft		793.3		666.7		736.3		858.7		879.9		869.6
26219	Special Industrial Paper		639.5		942.8		960.0		1,058.2		1,007.3		997.0
2621A	Tissue Paper and Other Machine Creped Paper	(	3,467.6		3,685.4	#	3,782.2		3,882.3		3,843.3	R	3,884.3
26210	Tissue Mill Products, Except Building Paper, N.S.K.	(			36.7		34.2		59.4		41.3		30.4
2631-	Paperboard Mill Products		10,064.9		9,390.0		9,932.8		11,886.2		10,574.4		11,316.6
26311	Unbleached Kraft Packaging and Industrial Converting Paperboard		4,575.9		4,076.1		4,101.0		5,218.1		4,655.3		5,110.6
26312	Bleached Packaging and Industrial Converting Paperboard		2,031.3		2,146.0		2,215.3		2,366.6		2,077.1		2,285.9
26313	Semichemical Paperboard		1,158.7		1,012.5		967.2		1,355.3		1,223.9		1,344.0
26314	Recycled Paperboard		2,173.3		2,062.1		2,537.3		2,607.0		2,512.6		2,474.5
26318	Wet Machine Board		76.8		62.8		64.8		81.6		78.3		66.5
26310	Paperboard Mill Product, N.S.K.		49.3		30.4		27.4		57.6		27.1		35.2
264-	Miscellaneous Converted Paper Products		24,273.3		25,043.7		26,562.3		29,924.0		30,367.1	R	31,999.9
2641-	Coated and Glazed Paper		4,803.4		4,903.1		5,314.1		6,451.9		6,653.7		7,096.6
26411	Printing Paper Coated at Establishments Not Making Paper		269.3		241.6		322.0		319.7		394.3		373.3
26413	Gummed Products		237.7		211.9		228.9		290.1		203.1		191.9
26414	Pressure Sensitive Products	(	1,857.3		1,867.6		2,110.6		2,616.3		2,660.8		2,728.4
26415	Single Web Paper, Coated Rolls & Sheets, Incl,Waxed, food Pkg. Uses	(			433.9		446.6		517.1		549.8		607.4
26416	Single Web Film, Coated Roll & Sheets,	(	1,607.6		168.2		194.0		317.2		344.5		413.9
26419	Paper/Paper Multiweb Laminations, for Packaging Uses	(			182.3		155.0		187.4		181.2		197.0
2641A	Multiweb laminated Rolls & Sheets, Exc . Paper/Paper & Foil for Pkg. Uses	(			544.8	#	562.7		683.8		751.8		863.5
2641B	Other Coated and Processed Paper, Except for Packaging		689.7		900.3	#	1,023.3		1,135.7		1,214.5		1,348.4
26410	Coated and Glazed Paper, N.S.K.		141.4		352.6	#	271.2		364.6		353.9		375.7
26420	Envelopes (Excluding Stationery Envelopes)		1,610.3		1,751.6	#	1,874.9		2,107.6		2,086.1		2,229.7
2643-	Bags, Except Textile Bags		5,037.6		4,772.8	#	5,081.3		5,387.6		5,541.9		5,839.2
26434	Grocer's Bags and Sacks, Variety, Shopping, Uncoated		1,209.5		1,163.8	#	1,181.9		1,183.4		1,084.7		1,006.5
26435	Specialty Bags and Liners, Single Web Paper, Coated	(			205.5	#	279.8		265.3		264.7		235.0
26436	Specialty Bags and Liners, Single Web Film	(	2,972.7		1,964.0	#	2,271.7		2,346.6		2,627.2		2,992.4
26437	Specialty Bags and Liners, Multiweb Lamination and Foil	(			222.1	#	244.4		235.0		241.5		370.5
26438	Shipping Sacks and Multiwall Bags, Except Textiles		805.8		846.5	#	878.1		963.1		884.7		889.3
26430	Bags, Except Textile Bags, N.S.K.		(S)		370.9	#	225.3		404.1		439.1		415.4
2645-	Die-Cut Paper and Board		1,514.8		1,605.1	#	1,797.6		1,880.0		1,651.0		1,690.0
26453	Die-Cut Paper and Board Office Supplies	(	826.5		597.9	#	660.2		652.3		618.5		642.5
26454	Die-Cut Paper and Board Products (Other than Office)	(			199.4	#	254.7		264.0		265.5		298.4
26455	Pasted, Lined, Laminated, or Surface-Coated Paperboard		576.0		684.8	#	745.3		828.3		592.3		567.6
26450	Die-Cut Paper and Board Products, N.S.K.		112.3		123.0	#	128.3		135.4		174.6		181.5
2646-	Pressed and Molded Pulp Goods		246.2		242.3	#	217.4		236.3		260.3		269.7
26461	Bituminous Fiber Pipe		(D)		(D)		(D)		(D)		(D)		(D)
26462	Other Pressed and Molded Pulp Goods		239.9		(D)		(D)		(D)		(D)		(D)
26460	Pressed and Molded Pulp Goods, N.S.K.		(D)		(D)		(D)		(D)		(D)		(D)
2647-	Sanitary Paper Products		7,752.3		8,373.5		8,815.8		9,771.5		10,193.7	R	10,732.0
26471	Sanitary Napkins and Tampons		919.2		915.1		944.3		1,162.5		1,167.0	R	1,334.3
26473	Disposable Diapers		**		2,158.5		2,175.0		2,593.9		2,608.9		2,992.9
26474	Sanitary Tissue Health Products		6,793.0		5,259.8		5,457.4		5,920.7		6,338.2		6,377.6
26470	Sanitary Paper Products, N.S.K.		40.1		40.1		39.1		94.4		79.6		97.1
2648-	Stationery Products		896.6		959.2		1,057.6		1,160.9		1,107.4		1,192.3
26481	Stationery		268.4		261.8		309.5		304.9		314.7		342.2
26482	Tablets and Related Products		569.4		603.1		653.9		736.0		686.9		760.1
26480	Stationery Products, N.S.K.		58.9		94.4		94.3		120.0		105.8		90.1
2649-	Converted Paper Products N.E.C.		2,412.1		2,436.1		2,803.6		2,928.2		2,873.0		2,947.4
26493	Wallcoverings		410.2		396.9		459.6		497.6		540.3		518.8
26494	Gift Wrap Paper		394.8		369.6		401.0		491.9		512.5		565.4
26496	Paper Business Machine Supplies, Office Supplies, N.E.C.	(	1,270.4		221.8		187.2		190.7		195.6		198.5
26497	Other Converted Paper and Board Products	(			1,082.6		1,210.2		1,261.7		1,211.8		1,250.5
26490	Converted Paper Products, N.E.C., N.S.K.		336.7		345.2		345.7		486.3		412.9		413.2
265-	Paperboard Containers and Boxes		18,548.5		18,578.1		19,906.5		21,988.9		22,179.6		22,508.1
26510	Bending Paperboard Packaging and Packaging Components		3,415.0		3,743.9		3,979.5		4,326.5		4,452.1		4,575.4
26520	Setup Paperboard Boxes		485.0		485.1		552.3		492.6		480.8		522.4
26530	Corrugated and Solid Fiber Boxes, Including Pallets		10,495.9		10,303.1		11,045.1		12,718.7		12,714.8		13,037.7
2654-	Sanitary Food Containers		2,627.2		2,555.8		2,668.4		2,749.7		2,853.2		2,806.3
26541	Milk and Other Beverage Cartons		512.6		550.5		535.2		577.5		590.1		569.2
26542	Cups and Liquid-Tight Containers		828.1		885.2		961.4		964.6		1,075.9		1,080.2
26544	Folding Sanitary Food Containers for Liquid, Etc.	(	1,299.1		714.7		771.8		730.3		739.3		734.0
26545	Other Sanitary Food Containers, Boards, and Trays	(			362.2		375.6		406.8		398.8		396.8
26540	Sanitary Food Containers, (Paperboard) N.S.K.		*		43.1		42.4		70.6		49.1		47.1
2655-	Fiber Cans, Drums, and Similar Products		1,525.4		1,490.3		1,843.2		1,879.4		1,678.7		1,564.3
26551	Paperboard Fiber Drums		286.5		289.8		317.2		312.7		333.1		314.8
26552	Fiber Cans, Tubes, and Similar Fiber Products		1,188.1		1,152.3		1,253.5		1,286.0		1,265.7		1,176.3
26550	Fiber Cans, Drums and Similar Products, N.S.K.		50.8		48.2		42.5		80.7		79.9		73.2
2661-	Building Paper and Board		500.4		354.3		415.9		426.6		417.3		346.1
26611	Fiberboard		206.7		186.9		225.0		245.9		251.3		197.2
26212	Construction Paper		253.5		165.3		189.2		174.7		158.7		137.3
26610	Building Paper and Board, N.S.K.		38.2		(Z)		1.7		(S)		7.2		10.6

SOURCE: Survey of Manufactures - Bureau of Census

* - Withheld R- Revised N.S.K. - Not Specified by Kind (1) Sum of reported data

** - Included in Sanitary Tissue Health Products (Z) - Less than half the unit shown (D) Data withheld to avoid disclosure

-Data for 1962 and later years based on revised SIC Codes published in 1962 Census of Manufact (S) Not up to statistical standard

SECTION II

REGIONAL DATA

The U.S. paper industry presently accounts for 30% of the world's paper and paperboard capacity along with 34% of its wood pulp capacity and, according to the API's 1989 Capacity Survey, is expected to maintain that position through 1992. That Survey also reports that most of the new U.S. paper, paperboard and wood pulp capacity will be built in the Southern states. Of the 10.6 million tons increase in paper and paperboard capacity scheduled for the 1988-1992 period, 6.3 million tons -- 59% -- will be located in these states. Similarly, 3.7 of the 6.9 millions tons of the scheduled increase in wood pulp capacity will be located there.

At the same time, capacity to produce paper, paperboard and wood pulp will increase in each of the nation's other regions.

These changes are spelled out in detail in Table XV on pages 44 and 45. The data, by major grade of paper, paperboard and wood pulp, include the totals for 1970 and 1980, permitting analysis of the changing regional structure of the industry over the decades of the 1970's and 1980's. The details for 1988 and 1992, based on the API's annual survey of new capacity plans, which were published in its December 1989 Survey, highlight future changes.

Table XIV (page 42) lists regional wood pulp, paper and paperboard production data for 1988, as published by the Department of Commerce. These data can be compared to the capacity data to determine regional operating rates. This table also includes information on pulpwood consumption.

The Chart on page 43 pictures the distribution of wood pulp and of paper and paperboard capacity in the nine Census regions for the year 1988. The table below presents the data for 1988 and for 1992.

	TOTAL PAPER AND BOARD		TOTAL PAPER		TOTAL PAPERBOARD		TOTAL OTHER		TOTAL WOOD PULP	
	1988	1992	1988	1992	1988	1992	1988	1992	1988	1992
	Percentage Distribution									
UNITED STATES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
NORTHEAST	15.1	13.6	23.8	21.5	5.9	5.4	21.6	20.7	8.0	7.1
NEW ENGLAND	7.7	7.1	13.5	12.3	2.3	2.2	2.4	2.6	5.6	5.1
MIDDLE ATLANTIC	7.4	6.5	10.3	9.2	3.7	3.2	19.3	18.1	2.3	2.1
NORTH CENTRAL	18.1	18.4	22.3	23.7	13.8	13.1	19.4	20.2	7.4	7.4
EAST NORTH CENTRAL	15.9	15.6	19.5	19.4	12.5	11.9	11.5	11.3	6.4	5.9
WEST NORTH CENTRAL	2.2	2.9	2.8	4.3	1.3	1.1	7.9	9.0	1.1	1.5
SOUTH	52.1	53.7	39.6	41.1	64.6	66.2	54.1	54.8	67.7	69.2
SOUTH ATLANTIC	24.3	24.0	16.1	16.1	32.5	31.9	22.6	22.1	31.8	31.6
EAST SOUTH CENTRAL	13.3	14.1	10.9	11.6	15.3	16.3	19.2	18.8	18.6	19.8
WEST SOUTH CENTRAL	14.6	15.7	12.6	13.4	16.7	18.1	12.2	13.9	17.3	17.8
MOUNTAIN AND PACIFIC	14.7	14.3	14.3	13.7	15.7	15.4	4.9	4.3	16.9	16.2

TABLE XIV

STATE DATA - 1988

(SHORT TONS)

GEOGRAPHIC AREAS	Pulpwood Consumption (Cords)*	Wood Pulp Production	PAPER AND PAPERBOARD SHIPMENTS				
			Total All Grades 1/	Paper	Paperboard	Wet Machine Board #	Construction Paper Plus Insulating Board
UNITED STATES, TOTAL	95,478,808	63,798,484	76,382,977	37,694,268	37,729,528	100,966	959,181
Northeast	7,577,662	4,987,540	10,376,045	8,283,750	2,092,295		
New England	N.A.	N.A.	N.A.	N.A.	N.A.		
Maine	3,873,260	2,461,661	(D)	3,333,373	(D)		
New Hampshire	-	-	(D)	(D)	(D)		
Vermont	-	(D)	(D)	141,875	(D)		
Massachusetts	-	-	665,735	387,005	278,730		
Rhode Island	-	-		-	-		
Connecticut	-	-		-	-		
Middle Atlantic	N.A.	N.A.	5,227,829	3,949,618	1,278,211		
New York	877,438	560,683	1,854,292	1,579,433	274,859		
New Jersey	-	(D)	731,830	425,845	305,985		
Pensylvania	1,492,037 (H)	1,501,774	2,641,707	1,944,340	697,367		
North Central	7,162,871	5,119,350	13,528,744	8,610,738	4,918,006		
East North Central	N.A.	N.A.	N.A.	N.A.	N.A.		
Ohio	1,141,131 (H)	874,776	2,210,672	980,774	1,229,898		
Indiana	-	-		-	-		
Illinois	-	-	610,540	171,562	438,978		
Michigan	1,223,797 (H)	1,282,320	3,067,796	1,638,435	1,429,361		
Wisconsin	2,694,661	1,905,350	5,215,747	4,534,981	680,766		
West North Central	N.A.	N.A.	N.A.	N.A.	N.A.		
Minnesota	1,624,716	873,868	(D)	1,267,998	(D)		
Iowa	-	-	-	-	-		
Missouri	-	-	-	-	-		
Kansas	-	-	-	-	-		
South	62,392,648	43,246,472	40,433,820	15,486,212	24,947,608	(N.A.)	(N.A.)
South Atlantic	N.A.	N.A.	N.A.	N.A.	N.A.		
Delaware	-	-	-	-	-		
Maryland	-	-	-	-	-		
Virginia	3,939,027	2,903,903	3,229,539	1,080,436	2,149,103		
West Virginia	-	-		-	-		
North Carolina	4,107,087	3,132,722	2,219,529	1,024,250	1,195,279		
South Carolina	4,458,397	2,840,500	(D)	(D)	1,818,398		
Georgia	10,156,353	7,109,591	6,393,391	1,544,823	4,848,568		
Florida	6,186,583	3,926,871	3,031,552	844,206	2,187,346		
East South Central	N.A.	N.A.	N.A.	N.A.	N.A.		
Kentucky	-	-	(D)	(D)	(D)		
Tennessee	338,826 (H)	1,775,839	2,310,644	1,115,525	1,195,119		
Alabama	9,686,410	6,079,057	5,666,724	2,593,338	3,073,386		
Mississippi	4,113,805	2,804,112	(D)	330,074	(D)		
West South Central	N.A.	N.A.	N.A.	N.A.	N.A.		
Arkansas	3,665,299	2,404,730	2,579,074	1,389,427	1,189,647		
Louisiana	7,477,995	5,332,157	5,348,345	2,080,367	3,267,978		
Oklahoma	-	-		-	-		
Texas	4,130,900	3,216,253	(D)	(D)	1,266,300		
West	18,345,627	10,445,122	11,085,187	5,313,568	5,771,619		
Mountain	N.A.	N.A.	N.A.	N.A.	N.A.		
Montana	-	-	-	-	-		
Idaho	-	-	-	-	-		
Colorado	-	-	-	-	-		
New Mexico	-	-	-	-	-		
Arizona	-	-	-	-	-		
Utah	-	-	-	-	-		
Pacific	N.A.	N.A.	-	N.A.	N.A.		
Washington	8,032,481	-	4,002,850	2,794,322	1,208,528		
Oregon	4,980,761	-	3,645,369	1,561,216	2,084,153		
California	-	-	2,027,550	568,936	1,458,614		
Alaska	(D)	-	-	-	-		

SOURCE: Bureau of the Census - Current Industrial Reports, Pulp, Paper and Board 1988. Series MA26A (88)-1 U.S. Department of Commerce, Washington DC

* - 128 Cu. Ft. roughwood basis # - Included in Paperboard totals

S - Softwood pulpwood only; hardwood pulpwood data withheld. H - Hardwood pulpwood only; softwood pulpwood data withheld.

(D) - Withheld by Commerce Department to avoid disclosure 1/ - Excludes 1,624,198 tons of hard pressed board not shown separately.

(R) - Revised N.A. - Not Available 2/ - Includes construction paper and insulating board totals not included in regional totals.

Chart 11

WOOD PULP REGIONAL CAPACITY–1988

TOTAL= 63, 754, 000 TONS

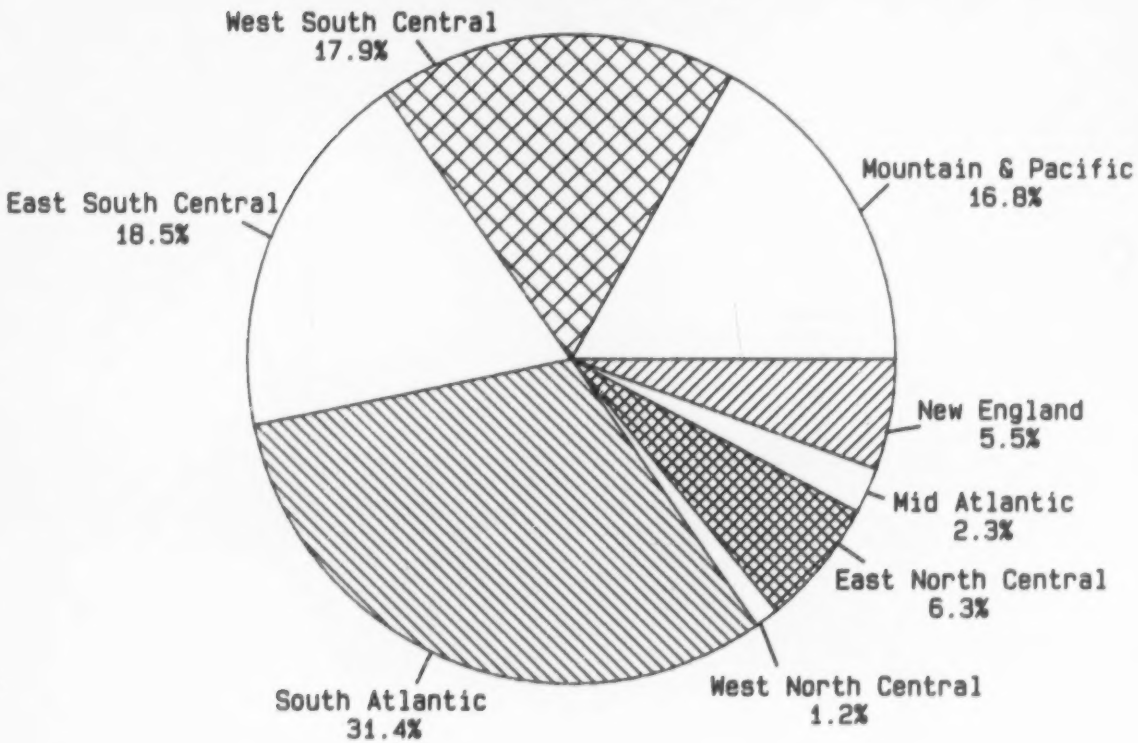


Chart 12

PAPER AND PAPERBOARD REGIONAL CAPACITY–1988

TOTAL= 82, 663, 000 TONS

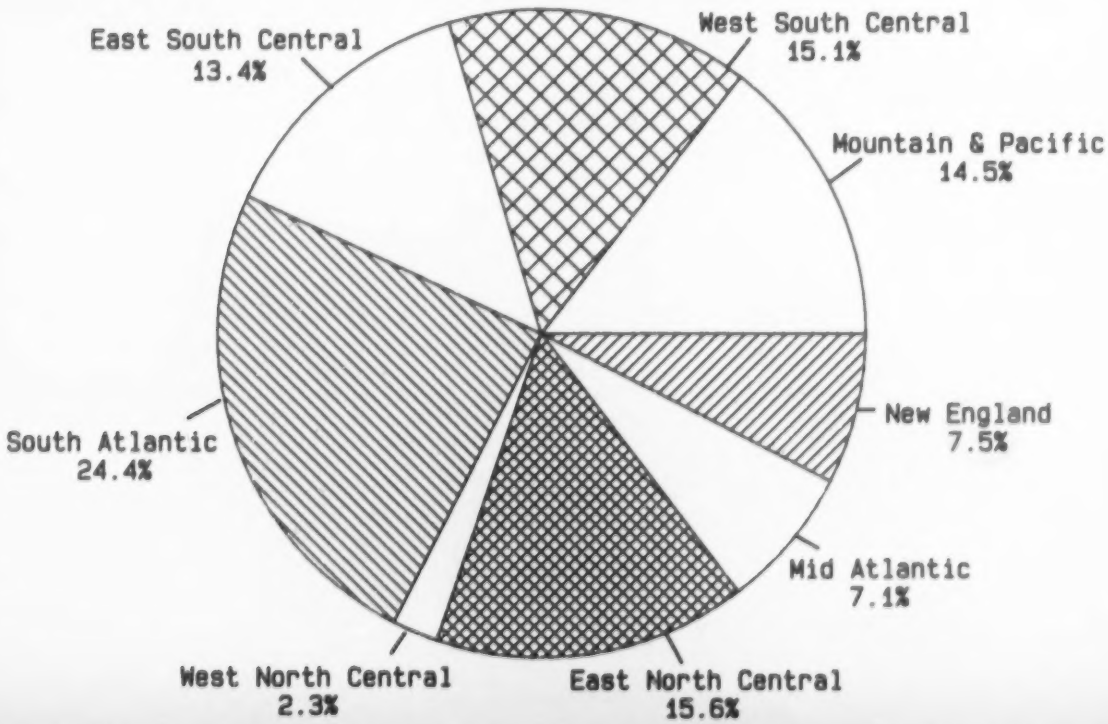


TABLE XV

PAPER, PAPERBOARD AND WOOD PULP CAPACITY BY CENSUS DIVISION

1970, 1980, 1985 - 1988, 1992

ANNUAL CAPACITY - 000 SHORT TONS

	PAPER AND PAPERBOARD TOTAL	PAPER					PAPERBOARD			
				Printing Writing & Related	Packaging & Industrial Converting			Unbleached Kraft		
		Total	Newsprint			Tissue	Total	Total	Liner Board	Solid Bleached
New England										
1970 *	4,748	3,660	417	2,419	367	457	895	-	-	34
1980	5,712	4,644	333	3,322	459	541	891	-	-	N.A.
1985	6,191	5,295	N.A.	3,920	498	531	838	-	-	N.A.
1986	6,025	5,122	N.A.	3,791	491	524	852	-	-	N.A.
1987	6,118	5,175	N.A.	3,812	498	522	886	-	-	N.A.
1988	6,241	5,289	N.A.	3,911	477	530	896	-	-	-
1992	6,658	5,622	N.A.	4,204	477	548	980	-	-	-
Middle Atlantic										
1970 *	5,354	3,411	149	1,926	300	1,036	2,087	-	-	-
1980	6,452	3,890	N.A.	2,312	224	1,155	1,912	-	-	-
1985	5,782	3,893	N.A.	2,350	306	1,022	1,414	-	-	-
1986	5,728	3,925	N.A.	2,379	318	1,019	1,390	-	-	-
1987	5,795	3,965	N.A.	2,400	315	1,034	1,413	-	-	-
1988	5,852	4,052	N.A.	2,449	315	1,069	1,408	-	-	-
1992	6,022	4,173	N.A.	2,556	336	1,061	1,458	-	-	-
East North Central										
1970 *	10,057	5,070	113	3,197	628	1,132	4,021	-	-	-
1980	11,253	6,202	140	4,056	768	1,237	4,238	-	-	-
1985	12,206	7,302	N.A.	4,913	856	1,380	4,635	-	-	-
1986	12,385	7,424	N.A.	5,017	845	1,401	4,714	-	-	-
1987	12,652	7,610	N.A.	5,151	888	1,412	4,797	-	-	-
1988	12,889	7,803	N.A.	5,305	898	1,424	4,842	-	-	-
1992	14,520	8,859	N.A.	6,076	1,053	1,552	5,418	-	-	-
West North Central										
1970 *	1,587	594	-	571	23	-	438	-	-	-
1980	1,856	850	-	834	17	-	440	-	-	-
1985	1,725	1,049	-	1,032	N.A.	-	488	-	-	-
1986	1,715	1,053	-	1,038	N.A.	-	493	-	-	-
1987	1,768	1,092	-	1,073	N.A.	-	504	-	-	-
1988	1,934	1,251	-	1,225	N.A.	-	508	-	-	-
1992	2,670	1,958	-	1,896	N.A.	-	518	-	-	-
South Atlantic										
1970 *	13,623	3,520	339	1,275	1,723	182	9,514	6,194	5,770	1,382
1980	16,945	4,746	676	1,965	1,699	386	11,409	7,469	6,945	1,788
1985	18,421	6,043	999	2,601	1,977	467	11,866	7,841	7,385	1,734
1986	18,901	6,128	1,049	2,706	1,880	494	12,288	8,034	7,551	1,914
1987	19,664	6,333	1,059	3,155	1,575	543	12,855	8,419	7,900	1,965
1988	20,195	6,490	1,069	3,311	1,481	629	13,227	8,718	8,190	1,916
1992	22,339	7,356	1,299	3,872	1,334	851	14,506	9,657	9,060	2,136
East South Central										
1970 *	7,137	2,792	833	747	739	473	3,439	2,232	2,168	626
1980	8,515	3,408	1,061	1,335	506	505	4,744	3,008	2,679	717
1985	10,206	4,117	1,069	2,165	307	556	5,682	3,543	3,127	777
1986	10,343	4,145	1,060	2,311	172	602	5,786	3,713	3,283	761
1987	10,785	4,404	1,147	2,440	175	641	5,962	3,827	3,378	800
1988	11,054	4,478	1,158	2,485	174	662	6,170	3,932	3,474	822
1992	13,102	5,297	1,617	2,814	174	692	7,399	4,895	4,202	861
West South Central										
1970 *	7,106	3,188	721	1,130	1,247	88	3,172	1,704	1442	871
1980	10,267	4,437	1,159	1,504	1,445	329	5,194	2,964	2,484	1,197
1985	11,025	4,548	1,142	1,669	1,241	496	6,211	3,719	3,231	1,352
1986	11,363	4,796	1,157	1,878	1,210	551	6,305	3,752	3,258	1,371
1987	11,886	5,018	1,193	2,155	1,214	455	6,586	3,938	3,469	1,431
1988	12,518	5,327	1,219	2,403	1,261	444	6,902	4,180	3,637	1,467
1992	14,596	6,088	1,254	3,026	1,288	519	8,210	5,013	4,367	1,607
Mountain and Pacific										
1970 *	8,340	3,571	888	954	913	817	4,053	2,177	2,136	435
1980	9,716	4,483	1,279	1,451	953	800	4,881	2,526	2,479	441
1985	11,066	5,333	1,848	1,808	783	894	5,587	3,042	2,996	478
1986	11,460	5,420	1,852	1,880	826	882	5,935	3,124	3,083	507
1987	11,672	5,484	1,887	1,892	807	898	6,103	3,238	3,203	521
1988	11,979	5,522	1,905	1,937	771	909	6,367	3,439	3,405	528
1992	13,327	6,248	2,321	2,014	934	979	6,987	3,684	3,651	598

SOURCE: American Paper Institute, Paper, Paperboard and Wood Pulp Capacity Survey, various issues through December 1989.

* Total Capacity at end of year.

N.A. Not Available - = Zero

TABLE XV (Cont.)

PAPER, PAPERBOARD AND WOOD PULP CAPACITY BY CENSUS DIVISION

1970, 1980, 1985 - 1988, 1992

ANNUAL CAPACITY - 000 SHORT TONS

	PAPERBOARD (Cont.)		CONSTRUCTION	WOOD PULP						
	Semi-Chemical	Recycled	Total Paper & Board	Total **	Dissolving	Sulphite	Semibleached Sulfate	Unbleached Sulfate	Semi-chemical	Mechanical
New England								(1)		
1970 *	179	682	192	2,797	-	484	1,061	53	140	953
1980	N.A.	663	176	3,253	-	N.A.	1,757	70	N.A.	908
1985	N.A.	709	58	3,472	-	N.A.	1,982	N.A.	N.A.	1,026
1986	N.A.	728	51	3,448	-	N.A.	1,992	N.A.	N.A.	1,044
1987	N.A.	764	57	3,464	-	N.A.	2,028	N.A.	N.A.	1,014
1988	N.A.	787	56	3,489	-	N.A.	2,054	N.A.	N.A.	1,013
1992	N.A.	867	56	3,639	-	N.A.	2,170	N.A.	N.A.	1,045
Middle Atlantic										
1970 *	-	2,087	856	1,357	-	143	312	88	325	247
1980	-	1,912	651	1,465	-	245	486	-	364	221
1985	-	1,414	475	1,394	-	N.A.	505	-	444	186
1986	-	1,390	413	1,401	-	N.A.	504	-	450	187
1987	-	1,413	417	1,429	-	N.A.	499	-	466	191
1988	-	1,408	392	1,438	-	N.A.	520	-	429	178
1992	-	1,458	391	1,459	-	N.A.	529	-	430	189
East North Central										
1970 *	1,128	2,769	966	3,209	-	567	601	165	987	462
1980	1,475	2,762	813	3,532	-	535	834	216	1,284	319
1985	1,677	2,956	269	3,537	-	462	1,007	N.A.	1,306	406
1986	1,768	2,943	247	3,924	-	469	1,327	N.A.	1,356	424
1987	1,818	2,978	245	4,014	-	400	1,408	N.A.	1,370	497
1988	1,852	2,990	244	4,010	-	351	1,430	N.A.	1,405	496
1992	1,910	3,508	243	4,200	-	359	1,543	N.A.	1,426	536
West North Central										
1970 *	176	262	555	959	-	44	206	24	265	266
1980	63	377	566	899	-	-	265	17	100	195
1985	N.A.	417	188	701	-	-	N.A.	N.A.	N.A.	269
1986	N.A.	421	169	690	-	-	N.A.	N.A.	N.A.	273
1987	N.A.	429	172	714	-	-	N.A.	N.A.	N.A.	282
1988	N.A.	433	175	790	-	-	N.A.	N.A.	N.A.	358
1992	N.A.	439	194	1,138	-	-	N.A.	N.A.	N.A.	558
South Atlantic										
1970 *	1,103	834	589	14,598	600	2	4,222	8,140	913	385
1980	1,116	1,037	790	17,364	658	-	5,842	9,014	879	509
1985	1,087	1,204	512	18,962	568	-	7,417	9,126	803	810
1986	1,123	1,218	485	19,227	529	-	7,724	9,077	802	845
1987	1,168	1,302	476	19,549	521	-	8,149	8,890	831	899
1988	1,209	1,384	478	20,048	524	-	8,448	8,996	891	986
1992	1,312	1,401	477	22,314	524	-	9,906	9,770	922	990
East South Central										
1970 *	333	248	906	7,586	285	-	2,481	2,871	429	844
1980	672	347	363	9,251	N.A.	-	3,956	3,435	590	852
1985	959	402	407	11,126	N.A.	-	5,338	3,653	796	887
1986	898	414	412	11,358	N.A.	-	5,583	3,672	692	954
1987	919	416	419	11,574	N.A.	-	5,657	3,826	671	973
1988	988	428	406	11,825	N.A.	-	5,840	3,891	733	983
1992	1,135	508	406	13,994	N.A.	-	7,077	4,337	812	1,387
West South Central										
1970 *	352	245	747	7,069	-	-	2,969	2,765	259	694
1980	708	326	635	10,059	-	-	3,896	4,326	620	979
1985	760	380	266	10,337	-	-	4,128	4,480	618	999
1986	789	394	262	10,442	-	-	4,184	4,577	629	944
1987	810	407	284	10,837	-	-	4,277	4,797	645	1,026
1988	840	416	289	11,424	-	-	4,630	4,941	650	1,055
1992	918	672	300	12,576	-	-	5,376	5,303	665	1,091
Mountain and Pacific										
1970 *	485	957	716	8,896	883	1,163	2,147	2,932	366	787
1980	720	1,193	352	9,391	703	885	2,656	3,273	620	1,086
1985	755	1,313	146	10,064	670	778	2,942	3,662	558	1,378
1986	803	1,500	105	10,197	651	791	2,955	3,764	577	1,388
1987	785	1,559	85	10,495	653	806	3,105	3,917	579	1,373
1988	715	1,556	90	10,730	693	798	3,266	4,013	535	1,361
1992	753	1,952	92	11,371	736	782	3,439	4,148	573	1,628

(1) Includes screenings. (2) Excludes deilbrated/exploded pulp capacity of mills that produce hard pressed board, 1985-1992.

* Total capacity at end of year. N.A. = Not Available - = Zero

** Includes soda pulp for 1970 as follows (000 tons): New England - 10, Middle Atlantic - 86, East South Central - 93, Mountain and Pacific - 4. Other years, soda pulp is included in sulfate pulp.

TABLE XVI

PAPER AND ALLIED PRODUCTS - 1986 DATA

	Number of All Employees (000)	Total Payroll ($000,000)	Number of Production Workers (000)	Wages of Production Workers	Value Added by Manufacture	Value of Shipments	Capital Expenditures
				Million Dollars			
NORTHEAST	163.7	4,048.3	122.3	2,626.0	10,192.6	22,231.3	1,172.6
New England	59.7	1,548.2	44.7	956.1	3,799.7	8,294.6	531.7
Maine	16.8	543.2	13.3	404.4	1,374.5	3,057.0	334.8
New Hampshire	6.4	163.6	4.5	96.5	368.5	878.4	40.8
Vermont	2.3	53.5	1.8	40.4	182.2	360.7	10.4
Massachusetts	24.7	564.7	17.6	357.6	1,202.4	2,699.1	95.8
Rhode Island	2.0	35.8	1.6	23.8	71.8	153.2	2.2
Connecticut	7.5	187.4	5.9	33.4	600.3	1,146.2	47.7
Middle Atlantic	104.0	2,500.1	77.6	1,669.9	6,392.9	13,936.7	640.9
New York	38.0	879.1	28.8	600.3	1,995.2	4,386.9	173.3
New Jersey	26.5	628.8	19.1	384.6	1,506.8	3,171.7	136.7
Pennsylvania	39.5	992.2	29.7	685.0	2,890.9	6,378.1	330.9
NORTH CENTRAL§	173.5	4,608.7	131.6	3,201.2	12,393.2	27,132.6	1357.9
East North Central	138.1	3,726.8	104.2	2,578.6	9,507.7	21,391.4	979.5
Ohio	30.1	801.2	22.7	568.4	1,668.7	3,981.2	149.9
Indiana	13.0	297.2	9.6	192.7	723.4	1,717.5	63.7
Illinois	33.7	784.8	26.0	520.2	1,985.3	4,258.9	131.8
Michigan	19.2	575.5	14.0	399.6	1,536.4	3,330.1	140.3
Wisconsin	42.1	1,268.1	31.9	897.7	3,593.9	8,103.7	493.8
West North Central§	35.4	881.9	27.4	622.6	2,885.5	5,741.2	378.4
Minnesota	13.5	375.2	10.6	270.6	1,283.7	2,366.1	244.9
Iowa	4.4	111.7	3.4	76.3	336.0	736.9	28.9
Missouri	11.6	272.6	9.0	197.6	868.7	1,796.8	85.6
North Dakota	-	-	-	-	-	-	-
South Dakota	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska	1.2	27.7	0.9	18.0	53.9	134.5	3.8
Kansas	4.7	94.7	3.5	60.1	343.2	706.9	15.2
SOUTH§	197.6	5,496.0	152.0	3,844.7	15,782.5	35,369.4	2,874.3
South Atlantic	102.3	2,799.4	77.8	1,884.3	7,945.3	17,707.1	1,731.0
Delaware	3.1	69.3	2.0	42.1	189.6	543.7	4.1
Maryland	10.5	233.7	7.2	45.8	546.4	1,066.6	105.0
Virginia	14.1	383.4	10.6	268.9	1,091.9	2,320.6	243.5
West Virginia	1.2	22.2	0.8	14.2	46.4	98.7	2.4
North Carolina	19.7	528.9	15.6	388.8	1,308.7	2,970.0	183.5
South Carolina	13.3	410.5	10.6	299.9	1,482.4	2,820.4	543.4
Georgia	27.4	777.7	20.8	548.1	2,359.6	5,506.7	414.1
Florida	13.0	373.7	10.2	276.5	920.3	2,380.4	235.0
East South Central	48.3	1,393.1	37.4	1,015.8	4,371.2	9,087.5	613.3
Kentucky	5.8	145.7	4.5	102.7	476.8	1,056.3	55.2
Tennessee	17.0	426.8	13.1	302.7	1,298.6	2,783.6	125.7
Alabama	17.8	601.6	13.7	450.7	1,972.5	3,820.1	371.6
Mississippi	7.7	219.0	6.1	159.7	623.3	1,427.5	60.8
West South Central	47.0	1,303.5	36.8	944.6	3,466.0	8,574.8	530.0
Arkansas	11.2	333.6	9.1	252.2	695.9	1,985.8	85.6
Louisiana	10.2	336.4	8.0	250.9	952.9	2,417.6	271.5
Oklahoma	3.5	98.7	2.9	77.5	333.2	778.5	(D)
Texas	22.1	534.8	16.8	364.0	1,484.0	3,392.9	172.9
WEST§	65.0	1,892.3	50.4	1,375.5	5,432.3	12,711.2	555.8
Mountain§	6.6	179.6	5.4	130.1	456.4	1,115.4	22.6
Montana	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Idaho	2.3	65.5	1.9	51.2	167.9	384.2	(D)
Wyoming	-	-	-	-	-	-	-
Colorado	1.7	54.7	1.3	34.6	113.7	304.7	18.9
New Mexico	-	-	-	-	-	-	-
Arizona	1.4	36.4	1.2	27.4	104.9	262.8	(D)
Utah	1.2	23.0	1.0	16.9	69.9	163.7	3.7
Nevada	-	-	-	-	-	-	-
Pacific§	58.4	1,712.7	45.0	1,245.4	4,975.9	11,595.8	533.2
Washington	15.3	510.1	11.9	396.3	1,412.0	3,424.9	145.2
Oregon	8.0	271.0	6.2	202.9	985.9	2,115.1	58.8
California	34.8	917.1	26.7	642.1	2,558.6	6,013.1	328.0
Hawaii	0.3	6.5	0.2	4.1	19.4	42.7	1.2
Alaska	(D)	(D)	(D)	(D)	(D)	(D)	(D)
TOTAL REPORTED	599.8	16,045.3	456.3	11,047.4	43,800.6	97,444.5	5,960.6
TOTAL U.S.A.	602.6	16,112.8	458.4	11,296.9	43,924.5	97,853.2	6,084.4

SOURCE: Annual Survey of Manufacturers, U.S. Department of Commerce - Statistics for Divisions and States - 1986.
(D) - Data withheld to avoid disclosure of individual company data. § - Total Reported.
NOTE: Each state has at least one establishment in the Paper and Allied Products Industry. - No Data Reported.

SECTION III

INPUTS AND RELATED DATA

This section presents data on inputs of labor, pulpwood, wood pulp, waste paper and energy required to manufacture paper and paperboard. Data on labor productivity and expenditures on new plant and equipment are also shown, along with separate data on capital equipment expenditures for protection of the environment and for research and development. Also included are tables on total and market wood pulp production, by grade, and on fibrous material consumption at paper and paperboard mills.

The use of energy by the pulp, paper and paperboard industry changed little from 1985 to 1989. Mills drew on self-generated and residue fuels for 56.3% of their total energy requirements in 1989, with spent liquor (solids) accounting for more than two-thirds of the self-generated total. Industry use of the various purchased fuels also changed only moderately. (See Table XVII).

The industry's use and production of the various fibrous raw materials are detailed in Tables XVIII to XXI.

Challenges in the nation's management of solid waste are making the industry's recovery and use of waste paper of greater and greater importance. The details of the long-term trends of waste paper collection and use are spelled out in Tables XVIII and XIX. The first table presents data on use of waste paper at paper and paperboard mills, other domestic uses of waste paper, waste paper imports and exports, and total waste paper collected and their relation to paper and paperboard production and new supply.

The industry has significantly increased its use of waste paper at paper and paperboard mills, with the total, which was the equivalent of 24.6% of domestic production in 1987 (the utilization rate), moving up to 25.2% in 1988 and 26.4% in 1989. This reflected a 10.7% increase in waste paper use, compared to a 3.3% increase in use of wood pulp as a paper-making fiber. Similarly, waste paper exports have been rising steeply; the 1989 total of 6.3 million tons was 6% above its 1988 total and 2.3 times the export volume of 1983.

The growth in domestic consumption and in exports of waste paper brought total waste paper recovery to 27.5 million tons in 1989, compared to 24.0 million tons in 1987 and 18.7 million tons in 1983. The recovery rate increased from 26.3% of the total new supply of paper and paperboard (including the construction grades) in 1983 to 28.8% in 1987 and to 32.4% in 1989.

Old corrugated is by far the largest grade of waste paper. Domestic use in 1989 exceeded 10 million tons, while total recovery, which included 2.7 million tons of exports, came in at more than 13 million tons. This was 5.3 million tons more than the 1980 total, the first year shown on Table XIX, with 69% of the gain coming from increased domestic use and 31% from exports. Recovery

of old newspapers (ONP) grew by 1.8 million tons in this 1980-1989 period, with use at domestic paper and paperboard mills accounting for 41% of the gain, exports 46% and other uses 13%. The rising trend of consumption of ONP at domestic mills reflects the expansion of capacity to produce new newsprint from old newspapers, along with new capacity at mills producing recycled paperboard and tissue papers where ONP is used as a fiber source.

Tables XXA and XXB describe the production trends, by major grades, of total and market wood pulp. The 1989 production totals were generally at record highs. The steepest percentage growth in total production was observed in the thermomechanical grades. TMP accounted for 4.7% of the production total in 1989, compared to 1.3% ten years earlier. The largest tonnages for both total and market wood pulp remain in the sulfate grades.

Table XXI reports the consumption of fibrous raw materials at paper and paperboard mills. Although wood pulp accounted for 74.4% of total fibrous materials consumed at paper and board mills in 1989, the total in that year was only 5.8% above that of 1986. The rising importance of waste paper is clearly delineated, with consumption rising 15.5%, from 17,935,000 tons 1986 to 20,686,000 tons in 1989.

Total employees and total production workers in the paper and allied products industry in 1989 rose to their highest levels since 1979 (see Table XXII). The entire increase in employment at paper and allied products establishments in the 1986-1989 period occurred at paper converters and at paperboard containers and box plants. Employment at pulp, paper and board mills remained virtually constant during this period, while paper and paperboard production increased 5.8 million tons and wood pulp production 3.4 million tons. During the past few years wage rates at the industry's mills and plants have been rising more slowly than the moderate trend in all manufacturing.

Despite the stability in pulp, paper and paperboard production evident in 1989 output per employee hour moved above its 1988 level, continuing an unbroken pattern of annual increases that started in 1981 (see Table XXIII). Much of the gains were the direct result of the industry's investments in new plant and equipment. The 1989 total (See Table XXV) amounted to $15.7 billion, a 38% jump from the 1988 total and nearly three times the amount spent in 1979. Table XXV also presents data on expenditures on new plant and equipment at the establishments of the paper and allied products industry, drawn from Census reports.

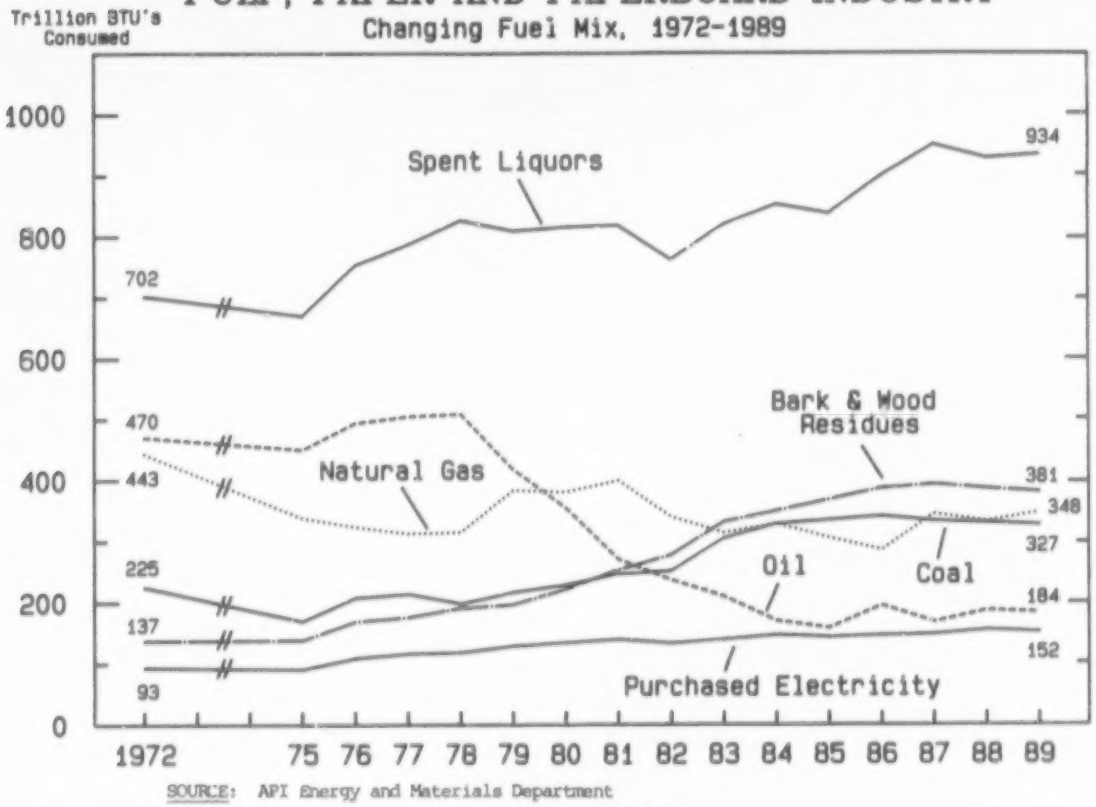
Table XXVI shows the industry's capital expenditures for water, air and solid waste disposal, along with data on expenditures for research and development.

The remaining tables in this section describe employee compensation patterns of the industry and the status of the industry's forests (Tables XXIV AND XXVII).

Chart 13

PULP, PAPER AND PAPERBOARD INDUSTRY

Changing Fuel Mix, 1972-1989



SOURCE: API Energy and Materials Department

Chart 14

PULP, PAPER AND BOARD INDUSTRY

ALL EMPLOYEES-OUTPUT PER MANHOUR

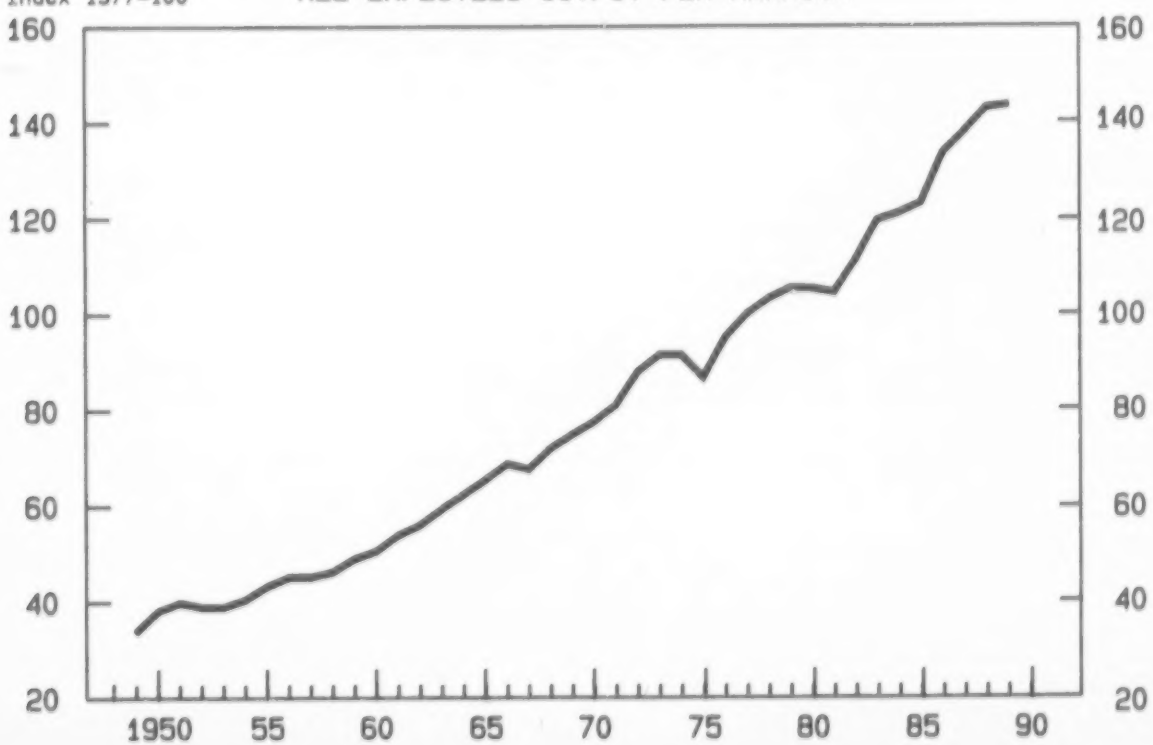


TABLE XVII

UNITED STATES

PULP, PAPER AND PAPERBOARD INDUSTRY

ESTIMATED FUEL AND ENERGY USE

1972, 1985 -1989

		1972 *			1985 *			1986 *		
SOURCE	Units	Estimated Use	Billion BTU'S	% of Total+	Estimated Use	Billion BTU's	% of Total+	Estimat Use	Billion BTU's	% of Total+
Purch. Electricity	MM KWH	26,055.7	88,585.7	4.4	42,134.4	143,390.3	6.6	43,026.5	146,392.0	6.4
Purchased Steam	MM lbs.	18,481.7	21,379.1	1.1	16,276.4	18,334.9	0.8	17,008.4	18,692.2	0.8
Coal	M Tons	8,540.6	212,474.4	10.7	13,545.8	335,103.7	15.3	13,791.1	340,969.1	14.9
Residual Fuel Oil	M 42 gal BBLs	67,240.5	422,970.3	21.2	23,732.8	149,537.7	6.8	31,142.2	187,078.4	8.2
Distilate Fuel Oil	M 42 gal BBLs	3,497.2	20,819.4	1.0	1,399.7	8,341.3	0.4	1,331.0	7,929.3	0.3
Liquid Propane Gas	M gal	27,008.1	2,485.4	0.1	36,726.5	3,372.7	0.2	31,197.8	2,910.3	0.1
Natural Gas	MMCF	411,699.1	419,694.2	21.1	300,780.2	305,737.8	14.0	280,538.7	285,619.4	12.5
Other Purch. Energy			1,544.9	0.1		2,946.2	0.1		3,203.3	0.1
Energy Sold			(-12,408.8)			(24,278.3)			(-29,483.7)	
Total Purch. Fossil Fuel and Energy			1,177,544.6	59.7		942,486.3	44.2		963,310.3	43.3
Hogged Fuel (50% Moisture Content)	M Tons	4,908.0	39,805.8	2.0	28,869.4	245,735.8	11.2	30,395.2	254,846.1	11.1
Bark (50% Moisture Content)	M Tons	9,783.6	89,276.5	4.5	14,268.2	122,465.8	5.6	15,375.9	132,441.7	5.8
Spent Liquor (Solids)	M Tons	52,164.9	660,285.9	33.3	69,714.1	837,069.2	38.3	74,528.1	897,406.4	39.1
Self-Generated Hydroelec. Power	MM KWH	2,549.2	8,670.8	0.4	2,457.4	8,845.2	0.4	2,664.3	9,064.1	0.4
Other Self-Generated Energy			2,815.0	0.1		7,514.4	0.3		7,322.7	0.3
Total Self-Generated & Residue Fuels			800,854.0	40.3		1,221,630.4	55.8		1,301,081.0	56.7
Total Energy			1,978,398.6	100.0		2,164,116.7	100.0		2,264,391.3	100.0
Total Production	M Tons		61,487.5							

* Based on a sample of 95.3% of production of total dried pulp, paper and paperboard for 1972, 93.9% for 1985 and 93.4% for 1986.

+ Determined by using "Total Energ, ' + "Energy Solid" as a denominator.

SOURCE: Energy and Materials Department; Pulp, Materials and Tehnology Group; American Paper Institute.

TABLE XVII (Cont.)

UNITED STATES

PULP, PAPER AND PAPERBOARD INDUSTRY

ESTIMATED FUEL AND ENERGY USE

1972, 1985 - 1989

		1987 *			1988 *			1989 *		
SOURCE	Units	Estimated Use	Billion BTU'S	% of Total+	Estimated Use	Billion BTU's	% of Total+	Estimate Use	Billion BTU's	% of Total+
Purch. Electricity	MM KWH	43,468.5	147,838.8	6.1	45,430.7	154,523.2	6.5	44,673.9	151,961.0	6.4
Purchased Steam	MM lbs.	14,081.1	17,364.0	0.7	18,874.6	20,822.2	0.9	16,755.2	18,216.4	0.8
Coal	M Tons	13,432.0	335,087.0	13.9	13,185.1	329,833.0	13.9	13,019.8	327,231.9	13.8
Residual Fuel Oil	M 42 gal BBLs	25,393.4	159,818.4	6.6	28,367.3	178,494.7	7.5	27,971.3	175,698.6	7.4
Distilate Fuel Oil	M 42 gal BBLs	1,423.6	8,499.8	0.4	1,499.2	8,953.2	0.4	1,413.0	8,437.2	0.4
Liquid Propane Gas	M gal	29,806.6	2,737.3	0.1	28,514.3	2,618.9	0.1	28,938.5	2,658.0	0.1
Natural Gas	MMCF	338,602.4	345,437.7	14.4	326,328.3	332,356.1	14.0	341,597.2	347,814.7	14.7
Other Purch. Energy			24,823.7	1.0		2,219.9	0.1		3,185.0	0.1
Energy Sold			(-35,386.5)			(-39,356.5)			(-31,521.5)	
Total Purch. Fossil Fuel and Energy			1,006,220.2	43.2		990,464.7	43.4		1,003,681.3	43.7
Hogged Fuel (50% Moist. Content)	M Tons	30,961.7	258,089.4	10.7	31,367.9	262,541.1	11.1	29,539.1	245,873.4	10.4
Bark (50% Moisture Content)	M Tons	16,779.3	134,869.3	5.6	14,345.2	123,693.4	5.2	15,914.5	134,790.9	5.7
Spent Liquor (Solids)	M Tons	76,918.4	949,556.5	39.6	75,361.8	928,310.1	39.3	75,812.8	933,587.0	39.2
Self-Generated Hydroelec. Power	MM KWH	3,448.0	11,662.2	0.5	3,309.8	11,258.5	0.5	3,728.9	12,683.5	0.5
Other Self-Generated Energy			10,177.4	0.4		11,451.5	0.5		11,163.0	0.5
Total Self-Generated & Residue Fuels			1,364,354.8	56.8		1,337,254.6	56.6		1,338,097.8	56.3
Total Energy			2,370,575.0	100.0		2,327,719.3	100.0		2,341,779.1	100.0
Total Production	M Tons		86,489.3			87,312.3			87,598.5	

* Based on a sample of 94.1% of production of total dried pulp, paper and paperboard for 1989, 94.5% for 1988, and 91.3% for 1987.
+ Determined by using "Total Energy" + "Energy Solid" as a denominator.
SOURCE: Energy and Materials Department; Pulp, Materials and Tehnology Group; American Paper Institute.

TABLE XVIII

UNITED STATES

RECYCLABLE PAPER UTILIZATION AND RECOVERY

1970 - 1989

(Thousands of Tons)

YEAR	Paper and Board Production	New Supply Paper and Board	Recyclable Paper Consumption at Paper & Board Mills	Recyclable Paper Utilization Rate	Recyclable Paper for Molded Pulp, Insulation and other Uses		Exports		Imports	Total Recyclable Paper Recovered	Recyclable Paper Recovery Rate
1970	51,671	55,969	11,803	22.8%	418		408		(67)	12,562	22.4%
1971	53,163	57,450	12,106	22.8%	442		419		(68)	12,899	22.5%
1972	57,434	62,040	12,925	22.5%	447		415		(88)	13,699	22.1%
1973	59,900	65,004	14,094	23.5%	499		683		(87)	15,189	23.4%
1974	59,040	63,308	13,982	23.7%	489		1,307		(89)	15,689	24.8%
1975	50,976	54,113	11,748	23.0%	535		861		(72)	13,072	24.2%
1976	58,329	62,015	13,622	23.4%	630		1,273		(106)	15,419	24.9%
1977	60,040	64,241	14,058	23.4%	870		1,512		(92)	16,348	25.4%
1978 R	62,047	67,787	14,760	23.8%	502		1,613	RS1	(70)	16,805	24.8%
1979 R	64,345	69,796	15,361	23.9%	509		2,127		(78)	17,919	25.7%
1980 R	63,600	67,166	14,922	23.5%	473		2,637		(87)	17,945	26.7%
1981 R	64,259	67,957	15,037	23.4%	480		2,282		(79)	17,720	26.1%
1982 R	60,951	64,729	14,433	23.7%	487		2,232		(74)	17,078	26.4%
1983 R	66,748	71,165	15,638	23.4%	475		2,705		(100)	18,718	26.3%
1984 R	70,248	76,936	16,724	23.8%	460		3,456		(110)	20,530	26.7%
1985 R	68,688	76,139	16,371	23.8%	529	RS2	3,556		(87)	20,369	26.8%
1986 R	72,505	79,754	17,935	24.7%	593		4,093		(99)	22,522	28.2%
1987 R	75,958	83,491	18,694	24.6%	657		4,809		(128)	24,033	28.8%
1988 R	78,025	85,[illegible]	19,684	25.2%	703		5,953		(160)	26,179	30.6%
1989 P	78,274	85,[illegible]	20,686	26.4%	712		6,307		(173)	27,532	32.4%

Paper and Board Production includes all grades of paper, paperboard, wet machine board, construction paper and board, excluding hard pressed board.

New Supply equals production plus imports less exports, excluding hard pressed board.
Imports and exports include paper and paperboard converted products.

Utilization Rate is the ratio of recyclable paper consumption to total production of paper and board.
Recovery Rate is the ratio of recyclable paper collected to new supply of paper and paperboard.

Total Recyclable Paper Recovered is the sum of Recyclable Paper Consumption at Paper and Board Mills, other uses and exports less imports.

RS1 - Waste paper exports 1978-1988 adjusted by data from Canadian Pulp and Paper Association
RS2 - Data on other uses for waste paper revised to reflect additional information on such uses as waste paper for animal bedding and for insulation.

R - Revised P - Preliminary

TABLE XIX
UNITED STATES
RECYCLABLE PAPER RECOVERY
1980–1989
(Thousands of Tons)

GRADE AND YEAR	Consumption at Paper and Board Mills	Consumption for Molded Pulp Insulation and Other	Exports RS	Sub Total	Imports	Total
Corrugated						
1980	6,866	-	1,266	8,132	(13)	8,119
1981	6,910	-	1,103	8,013	(12)	8,001
1982	6,770	-	1,012	7,782	(11)	7,771
1983	7,443	-	1,106	8,549	(14)	8,535
1984	7,972	-	1,409	9,381	(17)	9,364
1985	7,899	-	1,467	9,366	(5)	9,361
1986	8,634	-	1,738	10,372	(7)	10,365
1987 R	9,177	-	2,134	11,311	(13)	11,298
1988 P	9,909	-	2,482	12,391	(12)	12,379
1989 P	10,522	-	2,919	13,441	(33)	13,408
Newsprint						
1980	2,391	472	448	3,311	(10)	3,301
1981	2,372	480	444	3,296	(9)	3,287
1982	2,486	487	450	3,423	(12)	3,411
1983	2,508	474	504	3,486	(18)	3,468
1984	2,735	459	594	3,788	(15)	3,773
1985 R	2,696	529	668	3,893	(29)	3,864
1986	2,924	593	801	4,318	(31)	4,287
1987 R	2,936	657	930	4,523	(30)	4,493
1988 P	3,012	703	1,069	4,784	(30)	4,754
1989 P	3,125	712	1,281	5,118	(24)	5,094
Mixed						
1980	2,258	-	532	2,800	(55)	2,745
1981	2,233	-	393	2,626	(50)	2,576
1982	1,707	-	442	2,149	(45)	2,104
1983	1,905	-	633	2,541	(62)	2,479
1984	1,975	-	826	2,801	(69)	2,732
1985	1,902	-	854	2,756	(44)	2,712
1986	2,045	-	681	2,726	(43)	2,683
1987 R	2,116	-	725	2,841	(65)	2,776
1988 P	2,182	-	823	3,005	(96)	2,909
1989 P	2,240	-	854	3,093	(70)	3,023
Pulp Substitutes						
1980	2,254	-	392	2,646	(9)	2,637
1981	2,307	-	342	2,649	(8)	2,641
1982	2,247	-	328	2,575	(1)	2,574
1983	2,456	-	462	2,918	(5)	2,913
1984	2,673	-	627	3,300	(6)	3,294
1985	2,494	-	566	3,060	(3)	3,057
1986 R	2,761	-	873	3,634	(3)	3,631
1987 R	2,903	-	1,020	3,923	(2)	3,921
1988 P	2,890	-	1,579	4,469	(3)	4,466
1989 P	2,923	-	1,253	4,176	(13.0)	4,163
High Grade Deinking						
1980	1,142	-	176 *	1,142 *	(#)	1,142 *
1981	1,216	-	130 *	1,216 *	(#)	1,216 *
1982	1,224	-	140 *	1,224 *	(6)	1,218 *
1983	1,323	-	225 *	1,323 *	(1)	1,322 *
1984	1,369	-	297 *	1,369 *	(3)	1,366 *
1985	1,380	-	290 *	1,380 *	(6)	1,374 *
1986	1,570	-	447 *	1,570 *	(16)	1,554 *
1987 R	1,563	-	526 *	1,563 *	(18)	1,545 *
1988 P	1,690	-	842 *	1,690 *	(19)	1,671 *
1989 P	1,876	-	*	1,876 *	(33)	1,843 *
Total All Grades						
1980	14,922	472	2,637	18,031	(87)	17,944
1981	15,037	480	2,282	17,799	(79)	17,720
1982	14,433	487	2,232	17,152	(74)	17,078
1983	15,638	475	2,705	18,818	(100)	18,718
1984	16,724	459	3,456	20,639	(110)	20,529
1985	16,371 RSS	529	3,556	20,456	(87)	20,369
1986	17,935	593	4,093	22,621	(100)	22,521
1987 R	18,694	657	4,809	24,160	(128)	24,032
1988 P	19,684	703	5,953	26,340	(160)	26,180
1989 P	20,666	712	6,307	27,705	(173)	27,532

Less than 500 tons. *Exports included with pulp substitutes RSS Revised Serie R – Revised P – Preliminary

RS – Export data 1980 –1988 revised to reflect additional data from Canadian Pulp and Paper Association
Export data for 1989 as reported by the Bureau of the Census, based on the Harmonized Code System.
The Harmonized code Syustem combines exports of pulp subsitutues with high grade deinking

TABLE XXA

UNITED STATES PRODUCTION OF WOOD PULP

1979 -1989

(Thousands of Tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
WOOD PULP, TOTAL 1/	50,835	52,229	53,397	50,379	53,503	56,520	54,957	57,802	60,240	61,760	62,598
Total API Grades 2/	49,365	50,734	52,042	49,334	52,453	55,470	54,147	57,002	59,550	61,160	61,998
Sp. Alpha & Dissolving Grades	1,497	1,508	1,353	1,092	1,261	1,206	1,174	1,257	1,311	1,367	1,425
Paper and Board Grades	49,338	50,721	52,044	49,287	52,242	55,314	53,783	56,545	58,929	60,393	61,173
API Paper & Board Grades	47,868	49,226	50,689	48,242	51,192	54,264	52,973	55,745	58,239	59,793	60,573
Total Sulfite	1,775	1,844	1,802	1,587	1,616	1,618	1,560	1,439	1,440	1,560	1,563
Bleached Sulfite	1,379	1,459	1,403	1,242	1,306	1,359	1,364	1,275	1,269	1,365	1,373
Unbl. Sulfite	396	385	399	345	310	259	196	164	171	195	190
Total Sulfate	37,641	38,591	39,644	37,891	40,697	43,071	42,136	44,639	46,853	47,933	48,618
Bl. & Semi-Bl. 3/	18,051	19,000	20,070	19,721	21,107	22,350	22,626	24,158	25,411	26,302	26,949
Unbl. Sulfate	19,590	19,591	19,574	18,170	19,590	20,721	19,510	20,481	21,442	21,631	21,669
Total Groundwood	4,392	4,766	5,319	5,064	5,067	5,506	5,251	5,476	5,700	5,943	6,029
Stone and Refiner	3,755	3,602	3,735	3,395	3,225	3,361	3,118	3,010	2,960	3,089	3,058
Thermo-mechanical	637	1,164	1,584	1,669	1,842	2,145	2,133	2,466	2,740	2,854	2,971
Semichemical	4,060	4,025	3,924	3,700	3,812	4,069	4,026	4,191	4,246	4,357	4,363
Total Other	1,470	1,495	1,355	1,045	1,050	1,050	810	800	690	600	600
Defib. or Exploded 4/	1,070	975	850	625	620	620	550	540	440	400	400
Scr., Damaged E	100	80	90	20	30	30	30	30	25	25	25
Groundwood E	300	440	415	400	400	400	230	230	225	175	175

SOURCE: Pulp, Materials and Technology Group - API

1/ These totals are comparable to the capacity data published on Table XIII, Wood Pulp Capacity. Excludes defibrated and Exploded Wood Pulp for Hard Pressed Board

2/ Excludes Total Other 3/ Includes Soda Pulp

4/ Estimated to exclude wood pulp for hardboard. Source of original data is Bureau of the Census. E - Estimated

TABLE XXB

UNITED STATES PRODUCTION OF MARKET WOOD PULP

1979 - 1989

(Thousands of Tons)

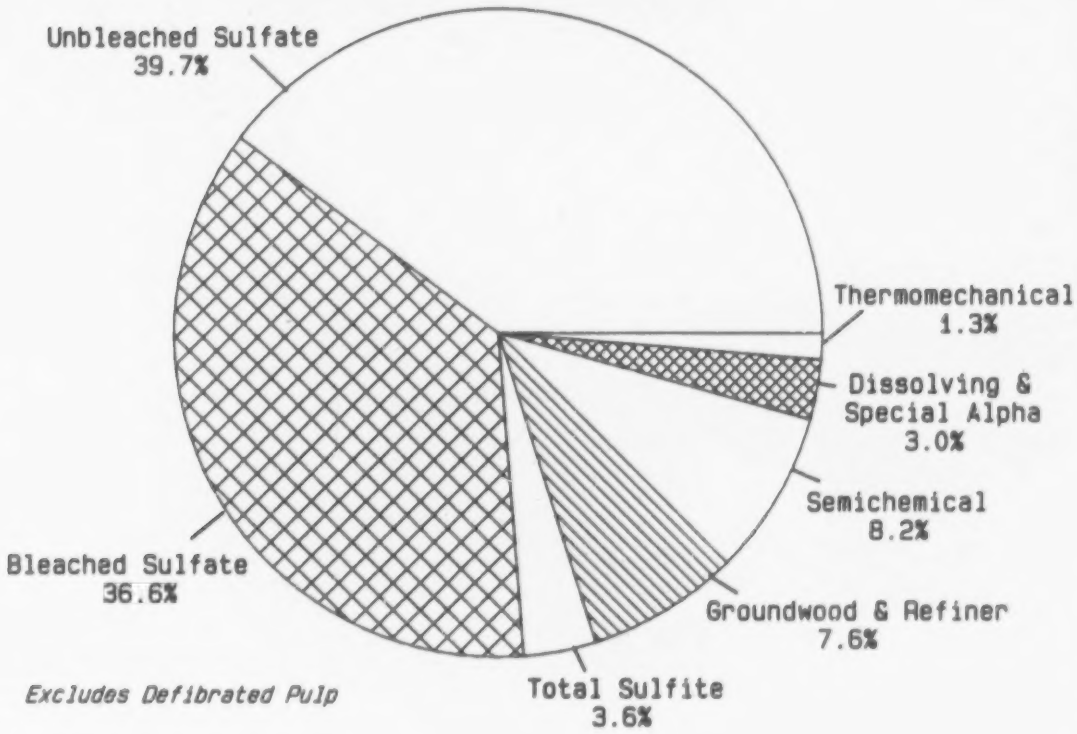
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
MARKET WOOD PULP, TOTAL	5,677	6,466	6,202	5,733	6,527	6,899	6,801	7,573	8,112	8,566	8,672
Sp. Alpha & Dissolving	1,497	1,506	1,350	1,089	1,260	1,204	1,172	1,252	1,308	1,365	1,422
Paper Grade Chemical Total	4,117	4,891	4,852	4,643	5,255	5,680	5,614	6,316	6,804	7,201	7,241
Bleached Sulfite	248	349	263	205	230	262	223	224	245	266	238
Unbleached Sulfite	28	32	3	0	0	0	0	0	0	0	0
Bl. & Semi-Bl. Sulfate	3,729	4,378	4,442	4,315	4,883	5,264	5,242	5,939	6,377	6,658	6,842
Unbleached Sulfate	112	132	144	123	142	154	149	153	182	277	161
Paper Grades - Other	63	69	0	1	12	15	15	5	0	0	9

SOURCE: Pulp, Materials and Technology Group - API

Chart 15

WOOD PULP PRODUCTION–1979

PRODUCTION= 49, 365, 000 TONS

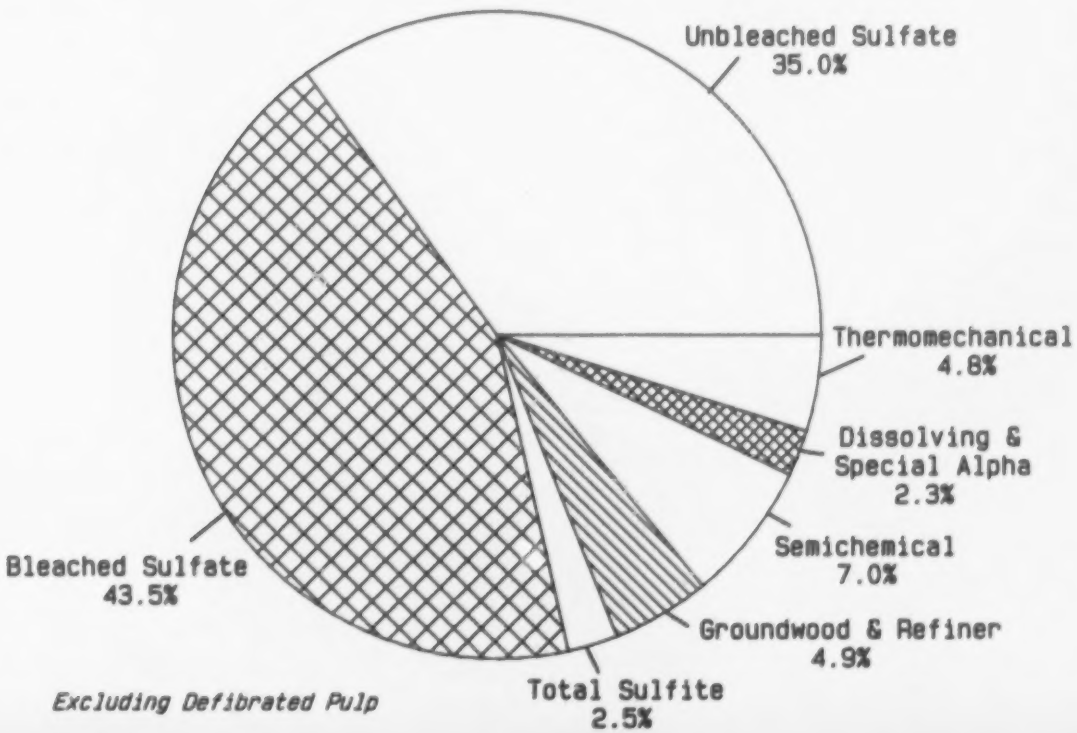


Excludes Defibrated Pulp

Chart 16

WOOD PULP PRODUCTION–1989

PRODUCTION= 61, 998, 000 TONS



Excluding Defibrated Pulp

TABLE XXI

CONSUMPTION OF PULPWOOD, WOOD PULP AND OTHER FIBROUS MATERIALS

IN PAPER AND PAPERBOARD MILLS

1979 - 1989

(000 Short Tons)

	1979	1980	1981	1982	1983	1984	1985	1986	1987 R	1988 R	1989 P
TOTAL WOOD PULP*	50,058	51,181	51,437	48,706	52,072	55,644	54,271	57,792	59,240	60,788	61,192
Special Alpha and Dissolving Grades	42	41	38	30	37	34	34	41	34	36	32
Bleached Sulfite	1,726	1,664	1,591	1,500	1,592	1,660	1,615	1,659	1,779	1,788	1,864
Unbleached Sulfite	468	464	464	465	435	413	341	309	296	311	288
Bleached Sulfate	18,454	18,941	18,992	19,090	20,376	21,755	22,332	23,994	24,593	25,622	25,798
Unbleached Sulfate	19,434	19,707	19,887	18,252	19,803	21,092	19,599	21,108	21,525	21,885	22,018
Groundwood	4,396	4,277	4,391	3,889	3,944	3,877	3,516	3,347	3,256	3,319	3,232
Thermomechanical	559	1,078	1,468	1,471	1,670	2,160	2,252	2,527	2,801	2,893	3,012
Semichemical	3,860	3,948	3,666	3,364	3,565	4,003	3,993	4,237	4,390	4,439	4,482
Defibrated or Expl. E	1,015	955	850	625	) 650	) 550	) 589	) 570	) 565	495	465
Scngs, Damaged	104	106	90	20	)	)	)	)	)		
OTHER FIBROUS MATERIALS											
TOTAL	16,088	15,524	15,629	14,882	16,069	17,089	16,666	18,248	19,014	20,061	21,075
Waste Paper	15,361	14,922	15,037	14,433	15,638	16,724	16,371	17,935	18,694	19,684	20,686
All Other, Incl. Straw, Rags, etc.	727	602	592	449	431	365	295	313	320	377	389
ALL FIBROUS MATERIALS											
TOTAL	66,146	66,705	67,066	63,588	68,141	72,733	70,937	76,040	78,254	80,849	82,267
PULPWOOD, TOTAL**	79,566	79,703	81,178	76,257	85,442	87,646	85,744	91,434	93,946	95,497	98,414
Softwood	58,654	58,809	59,631	55,954	61,947	62,558	60,610	63,127	65,177	65,997	68,058
Hardwood	20,912	20,894	21,547	20,303	23,495	25,088	25,134	28,307	28,769	29,500	30,356
Receipts of Residues	30,380	29,402	30,590	31,152	32,755	32,072	30,496	32,754	32,899	33,186	34,540
CONSUMPTION OF WOOD PULP IN OTHER THAN PAPER AND PAPERBOARD MILLS											
TOTAL WOOD PULP	884	825	788	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Sp.Alpha & Dis.	676	629	609	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Other Wood Pulps	208	208	196	179	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

SOURCE: Consumption in paper and board mills of wood pulp - 1977-1988 - Bureau of Census, Industry Division
Consumption of recycled paper - American Paper Institute
Consumption of other fibous materials - Bureau of Census, Industry Division, 1974-1980; 1981-1989, A.P.I.
Consumption of plywood - American Pulpwood Association

* Excludes wood pulp for hard pressed board.

** Includes slabs, chips and mill waste. All pulpwood data in thousands of cords.

R - Revised E - Estimated by American Paper Institute P - Preliminary N.A. - Not Available

Note: Details may not add to totals due to rounding of figures to nearest thousand.

Recyclable paper consumption - Bureau of the Census data (000 tons)
1972 - 11,703; 1973 - 12,374; 1974 - 1,2098; 1975 - 10,367; 1976 - 11,874; 1977 - 12,103;
1978 - 12,586; 1979 - 13,012; 1980 - 12,583; 1981 - 12,872; 1982 - 13,563; 1983 - 14,170; 1984 - 14,944;
1985 - 14,818; 1986 - 15,419; 1987- 16,996; 1988 - 17,601 Bleached pulp includes semibleached

Chart 17

CONSUMPTION OF FIBROUS RAW MATERIALS
AT PAPER AND PAPERBOARD MILLS- 1979

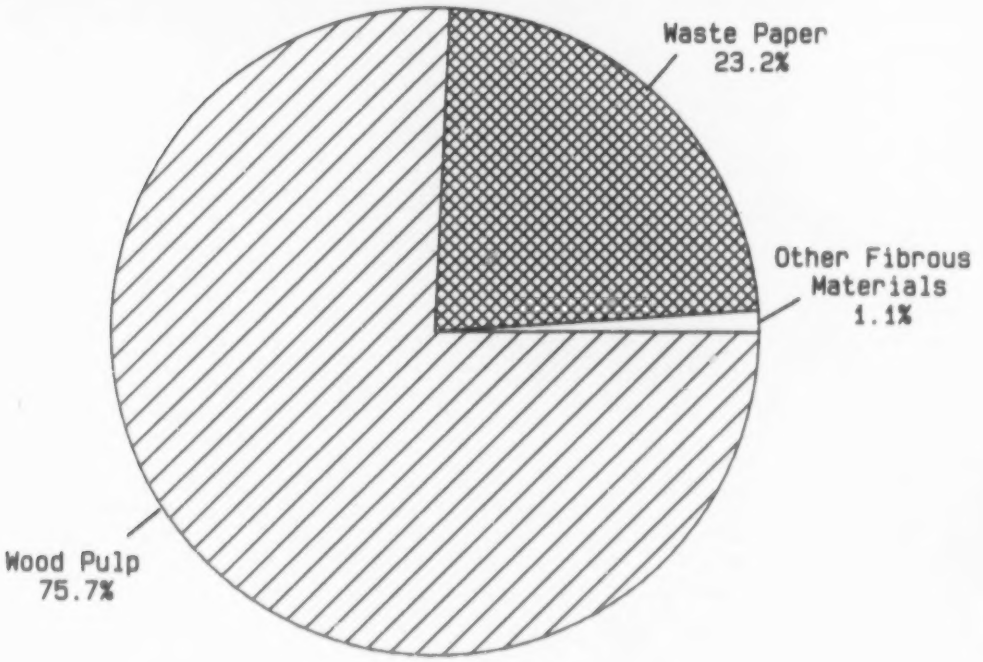


Chart 18

CONSUMPTION OF FIBROUS RAW MATERIALS
AT PAPER AND PAPERBOARD MILLS- 1989

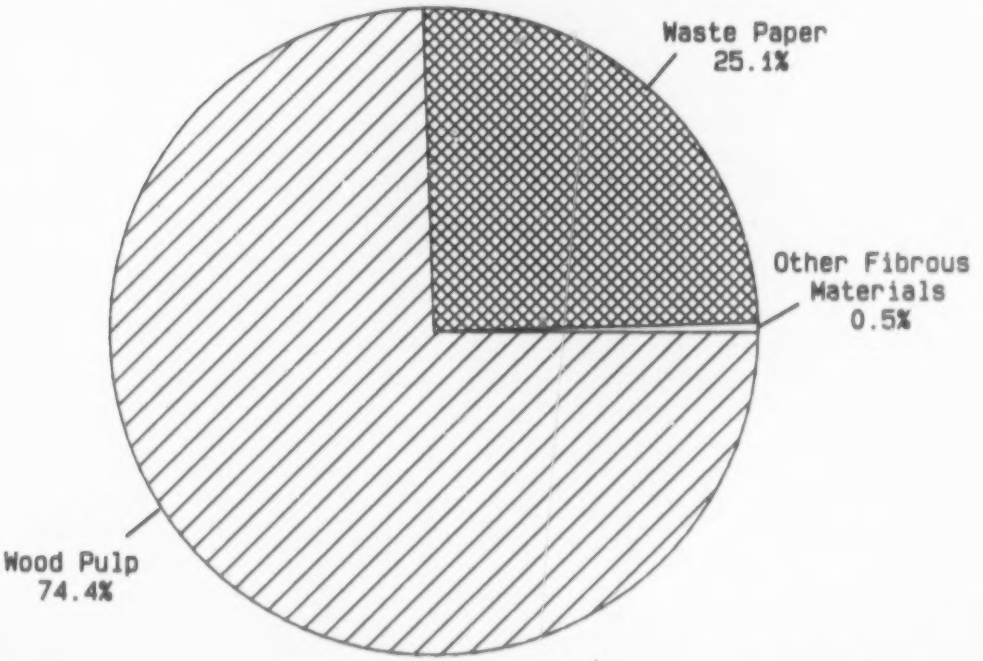


TABLE XXII

WAGE RATES AND EMPLOYMENT

PAPER AND ALLIED PRODUCTS INDUSTRY

1972 –1989

YEAR	Average Hourly Earnings (Dollars)	Average Weekly Earnings (Dollars)	Average Weekly Hours	Employees (Thousands) Total	Production Workers
PAPER AND ALLIED PRODUCTS – SIC 26					
1972	3.95	169.06	42.8	688.9	531.6
1973	4.20	180.18	42.9	704.6	543.1
1974	4.53	191.17 R	42.2	706.1	544.3
1975	5.01	208.42	41.6	642.0	479.7
1976	5.47	232.48	42.5	675.5	506.3
1977	5.96	255.68	42.9	691.6	518.2
1978	6.52	279.71	42.9	698.7	524.7
1979	7.13	303.74	42.6	706.8	535.6
1980	7.84	330.85	42.2	692.8	522.7
1981	8.60	365.50	42.5	688.5	518.4
1982	9.32	365.50	41.8	662.4	493.9
1983	9.93	389.56	42.6	661.2	494.5
1984	10.41	423.02	43.1	680.9	511.6
1985	10.83	448.67	43.1	677.7	512.1
1986	11.18	482.98	43.1	673.7	511.0
1987	11.43	496.06	43.4	680.1	516.3
1988	11.65	503.28	43.2	692.6	523.8
1989	11.93	516.57	43.3	697.2	525.4
PAPER AND PULP* – SIC 261,262,266					
1972	4.37	194.03	43.9	206.5	160.6
1973	4.66	208.77	44.4	206.7	162.7
1974	5.00	222.50	44.8	210.7	164.0
1975	5.54	240.44	44.5	196.8	150.3
1976	6.12	272.95	44.6	203.9	156.4
1977	6.75	302.40	44.8	205.4	157.3
1978	7.44	334.80	45.0	200.1	151.1
1979	8.26	372.53	45.1	205.9	154.7
1980	9.15	407.18	44.5	203.3	152.2
1981	10.06	449.68	44.7	203.8	153.2
1982	10.87	480.45	44.2	196.5	149.0
1983	11.70	520.65	44.5	196.0	149.0
1984	12.43	559.35	45.0	200.0	150.6
1985	13.14	591.30	45.0	197.0	149.4
1986	13.63	616.08	45.2	194.5	148.8
1987	14.01	638.96	45.6	191.8	145.9
1988	14.31	648.24	45.3	194.4	147.8
1989	14.71	664.89	45.2	194.3	147.4
PAPER MILLS EXCEPT BUILDING PAPER – SIC 262					
1972	4.36	194.46	44.6	179.2	138.6
1973	4.64	209.26	45.1	180.8	140.1
1974	4.97	222.66	44.8	182.7	141.1
1975	5.52	240.67	43.6	170.9	129.5
1976	6.10	273.89	44.9	176.4	134.2
1977	6.70	300.83	44.9	175.7	133.6
1978	7.43	336.56	45.3	170.3	127.6
1979	8.24	374.92	45.5	176.8	131.5
1980	9.09	408.14	44.9	175.0	129.7
1981	10.00	454.00	45.4	175.6	130.9
1982	10.86	485.44	44.7	171.3	127.2
1983	11.70	524.16	44.8	173.7	128.5
1984	12.46	563.19	45.2	175.5	130.7
1985	13.21	774.11	58.6	173.5	130.5
1986	13.70	621.98	45.4	170.2	129.4
1987	14.07	644.41	45.8	168.9	127.8
1988	14.33	650.58	45.4	173.2	131.1
1989	14.74	669.20	45.4	174.1	131.4

* Includes Building Paper and Board Mills

SOURCE: Bureau of Labor Statistics, Employment and Earnings, Tables B–2 and C–2, U.S. Department of Labor, Washington, D.C.

NOTE: Data on hours and earnings refer to Production Non–Supervisory Workers. R– Revised

TABLE XXII (Cont.)

WAGE RATES AND EMPLOYMENT

PAPER AND ALLIED PRODUCTS INDUSTRY

1972 – 1989

YEAR	Average Hourly Earnings (Dollars)	Average Weekly Earnings (Dollars)	Average Weekly Hours	Employees (Thousands) Total	Production Workers
PAPERBOARD – SIC 263					
1972	4.47	200.70	44.9	66.0	52.6
1973	4.78	212.23	44.4	66.1	52.5
1974	5.14	225.65	43.9	65.5	52.3
1975	5.74	243.95	42.5	60.8	47.9
1976	6.40	280.32	43.8	65.6	52.2
1977	6.94	312.30	45.0	66.9	52.4
1978	7.67	340.55	44.4	67.3	52.8
1979	8.38	367.88	43.9	65.5	51.9
1980	9.28	408.32	44.0	65.1	51.0
1981	10.23	450.12	44.0	63.5	49.8
1982	11.11	474.40	42.7	60.4	46.7
1983	12.11	525.57	43.4	58.2	44.5
1984	12.99	575.46	44.3	57.2	43.8
1985	13.60	599.76	44.1	55.3	42.4
1986	13.98	619.31	44.3	53.6	40.8
1987	14.30	632.06	44.2	53.6	40.4
1988	14.49	643.36	44.4	52.9	40.2
1989	14.76	661.25	44.8	52.9	40.5
MISCELLANEOUS CONVERTED PAPER PRODUCTS – SIC 264					
1972	3.61	151.26	41.9	196.4	143.1
1973	3.85	161.32	41.9	205.4	148.8
1974	4.19	173.05	41.3	210.6	155.8
1975	4.57	185.09	40.5	190.5	133.6
1976	4.92	202.21	41.1	200.8	140.8
1977	5.33	219.60	41.2	210.2	147.5
1978	5.82	239.20	41.1	217.8	155.9
1979	6.31	259.34	41.1	221.4	163.7
1980	6.89	279.73	40.6	219.6	162.7
1981	7.58	310.02	40.9	220.1	162.0
1982	8.20	332.10	40.5	213.5	154.7
1983	8.71	361.47	41.5	214.4	155.8
1984	9.09	379.05	41.7	226.5	165.4
1985	9.33	390.93	41.9	228.5	168.0
1986	9.62	403.08	41.9	229.0	168.8
1987	9.90	416.79	42.1	232.8	172.9
1988	10.10	422.18	41.8	238.6	175.1
1989	10.39	434.30	41.8	239.5	174.4
PAPERBOARD CONTAINERS & BOXES – SIC 265					
1972	3.64	151.06	41.5	219.9	175.3
1973	3.88	160.63	41.4	224.5	179.0
1974	4.16	168.06	40.4	219.3	172.2
1975	4.59	186.35	40.6	193.9	148.0
1976	4.95	204.44	41.3	205.2	158.9
1977	5.36	224.05	41.8	209.1	161.0
1978	5.89	247.97	42.1	213.5	164.9
1979	6.37	263.08	41.3	214.0	165.4
1980	6.94	285.93	41.2	204.9	156.8
1981	7.53	312.50	41.5	201.2	153.5
1982	8.16	329.66	40.4	190.0	143.6
1983	8.60	358.62	41.7	190.6	145.1
1984	8.92	377.32	42.3	197.2	151.8
1985	9.24	389.00	42.1	196.9	152.3
1986	9.58	407.15	42.5	196.6	152.6
1987	9.77	416.20	42.6	201.8	157.1
1988	9.99	425.57	42.6	206.8	160.7
1989	10.18	434.85	42.8	210.6	163.0

SOURCE: Bureau of Labor Statistics, Employment and Earnings, Tables B–2 and C–2, & Labstat Series Report, U.S. Dept. of Labor, Washington, D.C.

NOTE: Data on hours and earnings refer to Production Non–Supervisory Workers. R– Revised

TABLE XXIII

PULP, PAPER AND BOARD MILLS

OUTPUT PER MAN-HOUR

1947 - 1989

YEAR	Output per Employee Hour		Output	Employee Hours	
	Production Workers	All Employees		Production Workers	All Employees
			All Indexes: 1977 = 100		
1947	29.4	32.4	31.7	108.0	97.9
1948	N.A.	N.A.	33.0	N.A.	N.A.
1949	31.3	33.8	30.7	98.0	90.7
1950	35.0	38.1	36.7	104.8	96.3
1951	36.8	39.8	40.0	108.7	100.6
1952	36.3	38.9	38.0	104.7	97.6
1953	36.3	38.9	40.6	111.8	104.3
1954	37.9	40.4	41.4	109.1	102.5
1955	40.4	43.2	46.4	114.9	107.3
1956	42.5	45.1	49.2	115.7	109.1
1957	42.9	45.1	47.9	111.7	106.3
1958	44.1	46.2	48.1	109.1	104.2
1959	46.9	49.0	53.6	114.4	109.4
1960	48.8	50.6	54.8	112.2	108.3
1961	52.2	53.9	56.5	108.3	104.9
1962	54.2	56.0	59.5	109.8	106.3
1963	57.4	59.3	62.7	109.2	105.8
1964	60.3	62.3	66.7	110.6	107.0
1965	63.7	65.4	70.6	110.9	107.9
1966	66.9	68.7	76.1	113.8	110.8
1967	66.1	67.6	75.9	114.8	112.2
1968	69.9	71.9	81.6	116.8	113.5
1969	72.5	74.8	85.9	118.5	114.9
1970	75.8	77.5	85.1	112.2	109.8
1971	80.1	81.0	86.0	107.3	106.2
1972	86.7	87.9	92.8	107.0	105.6
1973	90.2	91.5	97.1	107.7	106.1
1974	90.5	91.5	96.7	106.8	105.7
1975	87.7	86.7	82.1	93.6	94.7
1976	95.0	95.0	95.6	100.6	100.6
1977	100.0	100.0	100.0	100.0	100.0
1978	103.7	103.2	102.4	98.7	99.2
1979	106.2	105.4	106.0	99.8	100.6
1980	106.4	105.2	105.3	99.0	100.1
1981	105.5	104.4	102.4	97.1	98.1
1982	113.7	111.3	103.1	90.7	92.6
1983	121.3	119.5	110.9	91.4	92.8
1984	123.1	121.0	115.1	93.5	95.1
1985	126.3	123.1	115.6	91.5	93.9
1986	135.8	133.5	122.4	90.1	91.7
1987R	141.3	138.0	125.9	89.1	91.2
1988R	146.0	142.8	130.7	89.5	91.5
1989E	146.7	143.5	131.2	89.4	91.4

SOURCE: U.S. Department of Labor - Bureau of Labor Statistics.

E - Estimated by A.P.I. R - Revised

TABLE XXIV

COMPENSATION OF EMPLOYEES IN THE PAPER AND ALLIED PRODUCTS INDUSTRY

IN THE GROSS NATIONAL PRODUCT ACCOUNTS

1948 - 1989

YEAR	COMPENSATION OF EMPLOYEES			Corporate Capital Consumption Allowance	Number of Full Time Equivalent Employees (000)	Number of Full Time & Part Time Employees (000)	Average Annual Earnings per Full Time Equivalent Employee (Dollars)
	Total	Wages and Salaries	Supplements to Wages & Salaries*				
	(Millions of Dollars)						
1948	1,577	1,501	76	122	470	470	3,194
1949	1,548	1,465	83	140	451	453	3,248
1950	1,788	1,686	102	154	482	485	3,498
1951	2,057	1,923	134	179	504	510	3,815
1952	2,143	2,004	139	204	497	504	4,032
1953	2,375	2,224	151	234	523	533	4,252
1954	2,457	2,292	165	275	522	534	4,391
1955	2,684	2,499	185	338	537	551	4,654
1956	2,919	2,712	207	370	554	570	4,895
1957	3,038	2,812	226	419	555	567	5,067
1958	3,117	2,868	249	464	542	558	5,292
1959	3,436	3,152	284	474	567	582	5,559
1960	3,596	3,288	308	496	576	592	5,708
1961	3,791	3,464	327	541	582	599	5,952
1962	4,042	3,678	364	653	598	615	6,151
1963	4,222	3,828	394	665	605	622	6,327
1964	4,446	4,028	418	721	607	625	6,636
1965	4,696	4,250	446	734	628	640	6,768
1966	5,133	4,616	517	771	656	667	7,037
1967	5,415	4,876	539	837	672	680	7,256
1968	5,885	5,267	618	898	681	691	7,734
1969	6,496	5,768	728	955	705	713	8,182
1970	6,788	5,994	794	1,007	694	702	8,637
1971	7,039	6,172	867	1,060	669	679	9,226
1972	7,708	6,704	1,004	1,167	674	684	9,947
1973	8,466	7,290	1,176	1,249	689	700	10,581
1974	9,216	7,885	1,331	1,281	688	701	11,461
1975	9,350	7,921	1,429	1,435	628	642	12,613
1976	10,909	9,167	1,742	1,667	662	673	13,847
1977	12,192	10,182	2,010	1,889	679	692	14,996
1978	13,498	11,219	2,279	2,126	690	700	16,259
1979	14,965	12,379	2,586	2,128	697	707	17,760
1980	16,199	13,384	2,815	2,564	681	691	19,653
1981	17,658	14,541	3,117	2,842	679	687	21,409
1982	18,250	14,994	3,256	3,287	649	663	23,103
1983	19,459	15,994	3,465	3,403	650	662	24,606
1984	21,180	17,476	3,704	4,304	666	680	26,240
1985	21,986	18,280	3,706	5,157	667	679	27,406
1986	23,043	19,127	3,916	5,158	664	676	28,806
1987R	24,117	20,030	4,087	5,723	674	683	29,718
1988R	25,433	21,128	4,305	N.A.	682	693	30,979
1989P	26,676	22,118	4,558	N.A.	693	703	31,916

SOURCE: Bureau of Economic Analysis, Department of Commerce, Gross National Product Accounts, Table 6

* Total Less Wages and Salaries

P - Preliminary R - Revised N.A. - Not Available

TABLE XXV

PAPER AND ALLIED PRODUCTS

CAPITAL EXPENDITURES

1947 - 1990

(Million Dollars)

YEAR	BY PAPER AND ALLIED PRODUCTS COMPANIES	AT PAPER AND ALLIED PRODUCTS ESTABLISHMENTS								
		Total SIC 26	PRIMARY MILLS					CONVERTED PLANTS		
			Total Primary 261-3,6	Pulp Mills 261	Paper Mills 262	Paperboard Mills 263	Building Paper & Board Mills 266	Total Converting 264,5	Converted Paper Products 264	Paperboard Containers & Boxes 265
1947	370	407	291	86	(205)		a	116	64	52
1948	383	----------	----------	----------	N.A.	----------	----------	----------	----------	----------
1949	298	315	212	(	212 a	)	a	103	52	51
1950	327	299	212	(	212 a	)	a	87	51	36
1951	420	389	263	(	263 a	)	a	126	61	65
1952	364	371	274	(	274 a	)	a	97	61	36
1953	409	397	276	(	276 a	)	a	121	74	47
1954	455	533	371	(	371 a	)	a	162	(162	)
1955	510	556	389	(	389 a	)	a	167	(167	)
1956	800	750	548	(	548 a	)	a	202	106	96
1957	810	767	585	(	585 a	)	a	182	(182	)
1958	570	634	417	43	259	102	13	218	82	136
1959	650	696	483	82	215	117	29 b	233	79 I	154
1960	770	656	442	35	246	136	25 b	216	1071 I	109
1961	620	685	473	49	286	108	31 b	212	99	113
1962	620	742	459	34	277	126	22 b	283	122 I	161
1963	700	708	440	39	233	160	8	270	129	141
1964	910	902	589	67	296	214	12	313	153	160
1965	1,020	1,186	826	112	496	200	18	359	180	179
1966	1,320	1,422	961	113	575	255	18	461	212	249
1967	1,490	1,585	1,122	122	581	399	20	463	226	237
1968	1,220	1,238	706	77	487	185	17	473	231	242
1969	1,620	1,421	879	133	565	158	33	543	263	280
1970	1,740	1,397	882	122	503	239	18	516	289	227
1971	1,290	1,197	755	135	374	228	18	442	262	180
1972	1,460	1,335	841	134	372	314	19	495	289	206
1973	1,990	1,530	997	119	508	344	26	531	304	227
1974	2,880	2,214	1,558	136	723	637	63	657	315	342
1975	2,930	2,719	1,959	294	832	807	26	759	412	347
1976	2,990	3,010	2,282	375	1,044	844	19	729	394	336
1977	3,480	3,296	2,367	301	1,116	934	17	929	507	421
1978	3,800	3,736	2,638	196	1,424	1,000	19	1100	604	496
1979	5,240	4,447 *	3,231	340	1,714	1,229	48	1216	725	491
1980	6,520	5,128 *	3,726	250	1,997	1,539	40	1,402	774	628
1981	6,110	5,202	3,957	521	2,435	974	27	1,245	746	499
1982	5,600	5,087	3,820	659	1,969	1,278	14	1,267	780	487
1983	5,920	4,987	3,497	916	2,239	527	15	1,290	820	470
1984	7,210	5,302	3,713	600	2,412	690	21	1,587	906	681
1985	8,590	6,273	4,290	748	2,484	1,043	18	1,982	1,218	764
1986	8,770	6,084	4,038	675	2,153	1,000	10	2,046	1,247	799
1987	9,010	5,905	3,916 *1)	369	2,783	795	N.A. 3)	1,989	1,163 2)	826
1988	11,380	----------	----------	----------	N.A.	----------	----------	----------	----------	----------
1989	15,690	----------	----------	----------	N.A.	----------	----------	----------	----------	----------
1990	17,200 E									

SOURCE: Paper and Allied Products Companies, Bureau of Economic Analysis
Paper and Allied Products Establishments, Bureau of the Census

NOTE: Establishment data for 1982, 1972, 1967, 1962, 1958, 1954 and 1947 from Census of Manufactures, data for other years from Survey of Manufactures.

NOTES: (a) Capital expenditures at building paper and board mills included with expenditures at pulp, paper and board mills.
(b) Data as originally published.
(I) Imputed from available data.

R - Revised E - Estimated by the Department of Commerce

* Based on revised sampling techniques which resulted in some understatement of the total.

P Preliminary

1) Includes building paper
2) Revised to SIC 267
3) Building paper included in 262; insulating board moved to 24

TABLE XXVIA

PULP AND PAPER INDUSTRY ENVIRONMENTAL PROTECTION

1966 - 1989

(Million Dollars)

YEAR	Water	Air	Solid Waste Disposal From Manufacturing	Total	Percent of Total Capital Expenditures
1966	270	129	10	409	
1967	44	31 (E)	1 (E)	76	
1968	49	43	1	93	
1969	74	52	2	128	
1970	120	65	2	187	
1971	134	66	3	203	
1972	205	129	5	339	38%
1973	179	162	10	351	34%
1974	216	296	11	523	31%
1975	286	341	18	645	30%
1976	319	216	29	564	29%
1977	278	148	17	443	19%
1978	182	149	32	363	16%
1979	178	158	23	359	12%
1980	140	190	38	368	9%
1981	91	120	49	260	6%
1982	81	214	23	318	9%
1983	118	149	60	327	6%
1984	62	130	34	226	6%
1985	121	175	46	342	7%
1986	80	109	48	237	4%
1987	93	242	68	403	10%
1988	129	360	83	572	11%
Through 1988	3,449	3,674	613	7,736	
Planned 1989	316	449	257	1,022	

SOURCE: National Council of the Paper Industry for Air and Stream Impprovement

(E) - Estimate

TABLE XXVIB

EXPENDITURES ON RESEARCH AND DEVELOPMENT

1966-1989

(Million Dollars)

YEAR	Total Expendtures
1966	117
1967	128
1968	144
1969	188
1970	178
1971	187
1972	189
1973	194
1974	237
1975	249
1976	313
1977	333
1978	387
1979	445
1980	495
1981	566
1982	552
1983	594
1984	538
1985	576
1986	538
1987	613
1988	662
1989	N.A.

SOURCE: National Science Foundation

TABLE XXVII

WOOD SUPPLY AND DEMAND

	Total	North-east	North Central	Great Plains	South-east	South Central	Pacific Northwest	Pacific Southwest	Rocky Mountain
Commercial: Forest Land in U.S January 1, 1987	483.3	80.1	74.6	3.5	84.6	110.8	54.7	17.4	57.6
	---------- Million Acres------- ----------								
Ownership									
Total Private	347.0	70.3	53.4	2.3	75.8	99.9	22.7	7.8	14.7
Forest Industry Companies	70.6	12.6	4.4	0.0	16.8	21.4	9.7	2.8	2.9
Other Private	276.4	57.7	49.0	2.3	59.0	78.4	13.0	5.1	11.8
Total Public	136.4	9.8	21.2	1.2	8.8	10.9	32.0	9.6	42.9
National Forest	85.2	2.2	7.3	0.9	4.9	6.9	19.5	8.7	34.8
Other Public	51.1	7.6	14.0	0.3	3.9	4.0	12.5	0.9	8.1
	---------- Million Cubic Feet--- ----------								
All Species									
Total Growth	22,526	2,948	2,564	86	5,169	5,260	3,412	1,046	2,041
Removals	16,451	1,302	1,406	42	4,167	4,531	3,342	830	829
Ratio of Growth to Removals	1.37	2.26	1.82	2.04	1.24	1.16	1.02	1.26	2.46
Softwoods									
Total Growth	12,870	702	587	47	2,972	2,877	2,877	889	1,909
Removals	11,367	521	205	26	2,836	2,906	3,239	819	817
Ratio of Growth to Removals	1.13	1.35	2.87	1.84	1.05	0.99	0.89	1.09	2.34
Hardwoods									
Total Growth	9,656	2,246	1,977	38	2,197	2,383	535	157	131
Removals	5,083	781	1,202	16	1,332	1,626	104	12	12
Total Growth	1.90	2.88	1.65	2.36	1.65	1.47	5.07	13.54	11.29

States by Region

Northeast	North Central	Great Plains	Southeast	South Central	Pacific Northwest	Pacific Southwest	Rocky Mountain
Connecticut	Illinois	Kansas	Florida	Alabama	Alaska	California	Arizona
Delaware	Indiana	Nebraska	Georgia	Arkansas	Oregon	Hawaii	Colorado
Maine	Iowa	North Dakota	N. Carolina	Kentucky	Washington		Idaho
Maryland	Michigan	South Dakota	S. Carolina	Louisiana			Montana
Massachusetts	Minnesota		Virginia	Mississippi			Nevada
New Hampshire	Missouri			Oklahoma			New Mexico
New Jersey	Ohio			Tennessee			Utah
New York	Wisconsin			Texas			Wyoming
Pennsylvania							
Rhode Island							
Vermont							
West Virginia							

SOURCE: An Analysis of the Timber Situation in the United States: 1989-2040
Part I: The Current Resource and Use Situation
A Technical Document Supporting the 1989 RPA Assessment
Tables 3.2; 3.28; 3.29
Forest Service, U.S. Department of Agriculture
Data on Growth, Removals and Mortality refer to 1986

SECTION IV

FINANCIAL DATA ON THE PAPER INDUSTRY

Although net sales of paper and allied products companies in 1989 moved 6% above their year-earlier high, to $113.6 billion, paper and paperboard markets generally softened during the course of the year. Paper and paperboard production in 1989 was fractionally above its year-ago level, but dollar receipts per ton trended downward from their highs at the beginning of the year. Nonetheless, the Producer Price Index of Paper and Allied Products (as reported by the Department of Labor, Bureau of Labor Statistics), which had increased 9% from 1987 to 1988, still gained 6% in 1989.

The financial data are reported on Table XXVIII. The table shows that the net profits before and after taxes decreased from their 1988 high in 1989, but still remained well above the totals for any earlier year. The margins on sales (net profits to net sales) fell to 9.6% for the before-tax figure and 6.2% after taxes. Similarly, after-tax profits as percent of net worth (return on equity) reached a record 18.4% in 1988 and eased down to 15.3% in 1989, a level second only to those recorded in only three earlier years.

The companies included in this Industry Group generally concentrate their output in paper and allied products. Today there are far fewer producers of paper and paperboard with major output in other industries than there were ten or twenty years ago.

Because the reporting agencies (it currently is the Bureau of the Census) move corporations from one industry to another as their product structure changes, the year-to-year data are not fully consistent with each other. Generally, the changes are not large, as in 1989, but there are exceptions, as in 1988. The totals do, nonetheless, provide valuable information on the trend of industry sales. Perhaps more important, the various ratios shown on this table, and others that could be computed from the reported data, were only slightly affected by the removal or introduction of companies into the industry.

This section also includes detailed data on the paper and allied products producers price indexes as reported by the Bureau of Labor Statistics of the U.S. Department of Labor. The indexes are presented in two different formats. The new ones, shown in Table XXIXB, which started in 1981 or 1982, combine the various indexes to mirror the activity of the Census product groups derived from the Standard Industrial Classification. The older one (Table XXIXA), which goes back to the early years of the century, show price indexes for specific products.

The last table in the regular part of this report (Table XXX) presents financial data on the various industries that comprise the Paper and Allied Products Industry Group (Industry Group 26) for 1986 as reported in the Bureau of the Census' Survey of Manufactures and for 1987 as reported in the Census of Manufactures. The data include industry employment and material costs, and capital expenditures.

TABLE XXVIII

PAPER AND ALLIED PRODUCTS INDUSTRY

PROFIT AND LOSS DATA, CASH INFLOW AND SELECTED BALANCE SHEET DATA

1950 - 1989

(Millions of Dollars)

YEAR	Net Sales	Net Profit Before Taxes	Net Profit Before Taxes To Net Sales (%)	Income Taxes	Net Profit After Taxes	Net Profit After Taxes To Net Sales (%)	Depreci-ation	Cash Inflow	Gross Cash Flow
1950	6,377	982	15.4	424	558	8.8	162	720	1,144
1951	8,022	1,417	17.7	858	559	6.9	183	742	1,600
1952	7,688	1,000	13.0	563	437	5.7	222	659	1,222
1953	8,371	1,005	12.0	554	450	5.4	242	692	1,246
1954	8,432	970	11.4	493	479	5.6	268	718	1,211
1955	9,847	1,206	12.2	601	604	6.1	310	917	1,515
1956	10,686	1,283	12.0	626	657	6.1	360	1017	1,643
1957	10,420	1,020	9.8	497	521	5.0	376	897	1,394
1958[1]	10,256	899	8.8	440	460	4.5	406	866	1,306
1958[2]	10,658	987	9.3	481	506	4.7	423	929	1,410
1959	11,824	1,204	10.2	585	619	5.2	459	1,078	1,663
1960	11,764	1,135	9.6	548	587	5.0	480	1,069	1,613
1961	12,525	1,120	8.9	535	583	4.7	531	1,114	1,649
1962	13,696	1,212	8.8	584	628	4.6	583	1,211	1,795
1963	14,050	1,215	8.6	581	634	4.5	615	1,249	1,830
1964	14,771	1,312	8.9	557	754	5.1	641	1,395	1,952
1965[1]	16,224	1,488	9.2	619	869	5.4	671	1,539	2,159
1965[2]	15,217	1,271	8.4	517	753	4.9	632	1,385	1,902
1966	17,016	1,544	9.1	633	911	5.4	676	1,587	2,220
1967/2	16,900	1,316	7.8	523	796	4.7	723	1,519	2,039
1968	18,738	1,534	8.2	645	889	4.7	780	1,669	2,314
1969	20,607	1,675	8.1	688	987	4.8	821	1,808	2,496
1970	21,069	1,211	5.7	492	719	3.4	869	1,588	2,080
1971[1]	22,224	967	4.4	455	512	2.3	926	1,438	1,893
1971[2]					N.A.				
1972	23,324	1,584	6.8	643	941	4.0	959	1,900	2,543
1973[1]	26,503	2,481	9.4	1,040	1,441	5.4	1,012	2,453	3,493
1973[2]					N.A.				
1974[1]	30,799	3,692	12.0	1,511	2,183	7.1	1,032	3,215	4,724
1974[2]	32,837	3,792	11.5	1,502	2,287	7.0	1,063	3,350	4,855
1975	32,044	2,901	5.7	1,099	1,801	5.6	1,219	3,019	4,120
1976	39,270	3,643	9.3	1,374	2,270	5.8	1,382	3,652	5,025
1977[1]	41,926	3,442	8.2	1,207	2,234	5.3	1,548	3,782	4,969
1977[2]	45,750	3,632	7.9	1,266	2,367	5.2	1,663	4,030	5,296
1978[1]	49,683	4,097	8.2	1,447	2,648	5.3	1,767	4,415	5,864
1978[2]	48,962	4,036	8.2	1,436	2,596	5.3	1,726	4,324	5,762
1979	55,359	5,406	9.8	1,683	3,723	5.7	1,896	5,619	7,302
1980[1]	59,333	4,318	7.3	1,275	3,042	5.1	2,075	5,119	6,392
1980[2]	54,737	4,014	7.3	1,233	2,781	5.1	1,990	4,771	6,004
1980[3]	56,250	4,045	7.2	1,245	2,800	5.0	2,026	4,826	6,071
1981[1]	62,502	4,728	7.6	1,621	3,108	5.0	2,253	5,361	6,981
1981[2]	62,699	4,728	7.5	1,617	3,110	5.0	2,267	5,377	6,995
1982	60,293	2,120	3.5	660	1,460	2.4	2,379	3,839	4,499
1983[1]	66,100	3,439	5.2	1,102	2,337	3.5	2,645	4,982	6,084
1983[2]	65,008	3,424	5.3	1,096	2,327	3.6	2,607	4,934	6,031
1984	71,891	4,812	6.7	1,796	3,015	4.2	2,798	5,813	7,611
1985[1]	71,761	4,424	6.2	1,533	2,891	4.0	3,107	5,998	7,531
1985[2]	71,466	4,399	6.2	1,519	2,880	4.0	3,099	5,979	7,498
1986[1]	74,896	5,318	7.1	2,025	3,293	4.4	3,390	6,683	8,708
1986[2/4]	74,844	5,298	7.1	2,018	3,280	4.4	3,389	6,669	8,687
1987[1]	86,603	8,077	9.3	3,088	4,989	5.8	3,827	8,816	11,904
1987[2]	95,576	8,860	9.3	3,338	5,520	5.8	4,279	9,799	13,139
1988[1]	107,014	12,204	11.4	4,127	8,077	7.5	4,620	12,697	16,824
1988[2]	107,221	12,210	11.4	4,129	8,081	7.5	4,625	12,706	16,835
1989[1]	112,238	10,771	9.6	3,771	7,000	6.2	4,964	11,964	15,725
1989[2]	113,573	10,865	9.6	3,819	7,047	6.2	5,010	12,057	15,875

SOURCE: Yearly data calculated by API from Quarterly Financial Report for Manufacturing, Mining and Trade Corporations, now reported by the Bureau of Census.

1/ Data is from Source consistent with earlier reports. 2/ Revised series - change in corporations included in industry.
3/ Series revised based on change in adjustment factors 4/ Excludes companies with less than $250,000 in assets.
N.A. Not Available E - Estimated by API with assistance from FTC.

TABLE XXVIII (Cont.)

PAPER AND ALLIED PRODUCTS INDUSTRY

PROFIT AND LOSS DATA, CASH INFLOW AND SELECTED BALANCE SHEET DATA

1950 - 1989

(Millions of Dollars)

YEAR	Cash Dividends	Retained Earnings	Net Cash Flow	Total Assets	Property Plant & Equipment Gross	Property Plant & Equipment Net	Net Worth	Long Term Debt	Total Capital	Net Profit After Taxes To Net Worth (%)
1950	178	380	542	5,055	N.A.	2,285	3,585	490	4,075	15.6
1951	200	359	542	6,005	N.A.	2,600	3,963	625	4,588	14.1
1952	196	241	463	6,301	4,643	2,777	4,298	784	5,082	10.1
1953	203	247	489	6,825	5,349	3,273	4,559	803	5,362	9.9
1954	227	252	520	7,085	5,694	3,367	4,963	908	5,871	9.7
1955	259	345	655	7,785	6,171	3,623	5,403	1,010	6,413	11.2
1956	273	384	744	8,492	7,028	4,213	5,772	1,286	7,058	11.4
1957	270	251	627	8,407	7,502	4,509	5,809	1,309	7,118	8.9
1958l/	265	195	601	8,829	7,941	4,652	6,069	1,472	7,561	7.6
1958l/	286	220	643	9,170	8,200	4,818	6,341	1,500	7,841	8.0
1959	290	329	788	9,721	8,740	5,062	6,642	1,512	8,154	9.3
1960	312	275	755	10,087	9,432	5,385	6,956	1,622	8,578	8.4
1961	328	255	786	11,051	10,447	5,857	7,612	1,719	9,331	7.6
1962	340	288	871	11,670	11,056	6,062	7,756	1,963	9,719	8.1
1963	348	286	901	11,859	11,420	6,079	7,886	1,964	9,850	8.0
1964	376	378	1,019	12,560	12,380	6,585	8,304	1,967	10,271	9.1
1965l/	409	461	1,132	13,850	13,378	7,321	8,672	2,439	11,111	10.0
1965l/	350	403	1,035	13,017	13,047	7,053	8,165	2,447	10,612	9.2
1966	372	539	1,215	14,621	14,662	8,131	8,710	3,104	11,814	10.5
1967l/	391	405	1,128	15,645	15,403	8,579	9,011	3,736	12,747	8.8
1968	396	493	1,273	16,809	16,059	8,964	9,303	4,199	13,502	9.6
1969	418	569	1,390	18,794	17,169	9,529	10,212	4,267	14,479	9.7
1970	430	289	1,158	19,679	18,160	9,969	10,305	4,822	15,127	7.0
1971l/	418	94	1,020	20,424	19,001	10,194	10,652	5,239	15,891	4.8
1971l/	N.A.	N.A.	N.A.	19,582	18,558	9,987	10,326	5,137	15,463	N.A.
1972	377	564	1,523	19,810	19,816	9,903	10,615	4,973	15,588	8.9
1973l/	416	1,025	2,037	21,377	19,996	10,616	11,536	5,073	15,609	12.5
1973l/	N.A.	N.A.	N.A.	20,506	18,740	9,888	11,166	4,935	16,101	N.A.
1974l/	519	1,668	2,700	23,696	19,093	11,524	12,956	5,346	18,304	16.8
1974l/	530	1,754	2,817	26,088	21,856	12,012	13,602	6,457	20,059	16.8
1975	632	1,158	2,377	28,220	24,265	13,773	14,878	7,193	22,071	12.1
1976	660	1,601	2,983	32,010	27,284	15,659	17,203	7,625	24,828	13.2
1977l/	725	1,502	3,050	34,450	29,545	17,131	18,321	8,551	26,872	12.2
1977l/	793	1,566	3,229	37,047	31,866	18,590	19,704	9,254	28,958	12.0
1978l/	877	1,771	3,838	40,810	34,420	20,226	21,181	10,082	31,263	12.5
1978l/	859	1,739	3,465	40,118	33,563	19,644	20,794	9,900	30,694	12.5
1979	975	2,746	4,642	45,304	37,069	22,349	23,206	11,028	34,234	16.0
1980l/	1,089	1,957	4,032	50,040	41,403	25,739	25,889	11,850	37,739	11.8
1980l/	1,050	1,731	3,721	44,866	39,534	24,391	23,873	10,365	34,238	11.6
1980l/E	1,057	1,743	3,769	45,894	40,361	24,800	24,396	10,585	34,981	11.5
1981l/	1,161	1,947	4,200	50,706	44,942	27,747	26,452	11,633	38,085	11.7
1981l/	1,126	1,964	4,251	50,912	45,122	27,881	26,558	11,705	38,263	11.7
1982	1,104	355	2,735	52,915	48,235	29,711	26,705	13,149	39,854	5.5
1983l/	1,139	1,197	3,842	56,126	51,692	32,208	27,509	13,946	41,455	8.5
1983l/	1,137	1,191	3,798	54,821	50,957	31,826	27,219	13,565	40,784	8.5
1984	1,217	1,798	4,596	58,520	53,882	34,563	28,160	13,802	41,962	10.7
1985l/	1,242	1,649	4,756	62,613	60,485	38,881	29,780	15,262	45,042	9.7
1985l/	1,240	1,640	4,739	62,506	60,341	38,835	29,694	15,262	44,956	9.7
1986l/	1,361	1,932	5,322	69,132	64,902	42,339	31,254	18,920	50,174	10.5
1986l/4/	1,356	1,924	5,313	69,082	64,902	42,339	31,221	18,906	50,127	10.5
1987l/	1,478	3,511	7,338	76,791	70,856	45,896	35,102	20,152	55,254	14.2
1987l/	1,557	3,833	8,112	85,279	78,495	50,634	39,217	22,417	61,634	14.1
1988l/	1,700	6,377	10,997	95,295	85,747	55,439	42,933	27,068	70,001	18.8
1988l/	1,700	6,381	11,006	95,444	85,830	55,520	42,940	27,180	70,120	18.8
1989l/	3,163	3,836	8,790	107,572	96,336	62,723	45,888	33,193	79,081	15.3
1989l/	3,183	3,864	8,874	109,036	96,449	62,804	45,642	34,543	80,185	15.4

See Page 66 for footnotes

Net Cash Flow = Retained Earnings + Depreciation

Cash Inflow = Net Profit After Taxes + Depreciation

Gross Cash Flow = Net Profit Before Taxes + Depreciation

Total Capital = Net Worth + Long Term Debt

TABLE XXIXA

PRODUCERS PRICE INDEXES
FOR COMMODITY GROUPING AND INDIVIDUAL ITEMS
WOOD PULP, PAPER, PAPERBOARD AND CONVERTED PRODUCTS
1982 - 1989
(Index 1982 = 100)

	1982 BLS Price Codes	1982	1983	1984	1985	1986	1987	1988	1989
PULP, PAPER & ALLIED PRODUCTS	09	100.0	103.3	110.3	113.3	116.1	121.8	130.4	137.8
PULP, PAPER & PRODUCTS, exc. Building Paper & Board	091	100.0	99.3	107.3	106.9	107.6	114.3	124.8	132.4
Wood Pulp Sub-Group	0911	100.0	91.5	104.8	91.4	94.7	111.5	136.7	157.4
Paper Making Wood pulp	091102	100.0	89.6	106.3	88.2	95.6	120.6	151.6	175.0
Sulfate, Bleached	09110211	100.0	86.7	111.0	89.8	98.1	124.3	155.1	182.5
Bleached Sulfate Hardwood Pulp	09110212	100.0	N.A.	111.6	93.3	97.0	115.0	147.8	165.3
Other	09110223	N.A.	N.A.	N.A.	110.6	110.0	116.3	124.5	129.5
Dissolving Wood Pulp	091103	97.5	96.1	97.5	96.7	96.2	98.6	111.4	132.4
Waste Paper Sub-Group	0912	100.0	N.A.	198.2	122.9	142.6	181.4	183.6	157.1
News	091201	100.0	N.A.	267.8	208.1	191.3	243.9	239.9	124.4
Mixed	091202	N.A.	N.A.	173.0	147.2	129.0	153.1	168.7	115.3
Old Corrugated Boxes	091203	N.A.	N.A.	317.8	155.0	238.1	313.3	250.5	180.4
High Grade (Pulp.substit. & deink.)*	091207	N.A.	N.A.	N.A.	N.A.	N.A.	109.6	131.9	136.2
Exports*	091208	N.A.	N.A.	N.A.	N.A.	N.A.	125.9	126.8	113.9
Paper Sub-Group	0913	100.0	98.5	105.8	106.0	107.0	111.5	123.2	129.6
Paper, except Newsprint	091301	100.0	99.5	108.2	107.4	107.9	110.6	123.4	130.5
Printing Paper, Ctd. 2 Sides, Other Grades	09130116	100.0	101.1	112.3	118.0	116.4	117.4	126.3	131.7
Printing Paper, Ctd. 1 Side	09130117	100.0	101.6	108.2	110.3	111.2	116.1	126.5	133.5
Book Paper, Uncoated Offset	09130122	100.0	98.7	105.7	100.5	101.7	105.3	118.4	125.5
Wood Bond, Unwatermarked	09130131	100.0	100.3	103.8	101.9	102.1	103.6	117.1	127.9
Form Bond. 15 lb.	09130134	100.0	97.7	108.0	94.0	93.8	102.4	117.7	121.8
Other Form Bond	09130135	100.0	97.6	106.6	93.2	96.0	104.3	121.3	124.3
Other Bond, Exc. Form	09130136	100.0	100.0	107.7	106.2	107.9	111.2	126.5	138.1
Other Chemical Wood free	09130137	100.0	99.2	112.2	100.9	103.9	110.6	131.6	140.9
25% Cotton Fiber	09130141	100.0	101.7	112.4	113.8	117.0	127.1	N.A.	N.A.
Thin Paper	09130142	100.0	100.5	105.7	108.3	111.9	117.5	N.A.	N.A.
Cover & Text	09130148	100.0	102.1	111.0	112.0	115.5	122.6	131.9	138.7
Uncoated Body Stock	09130149	100.0	97.3	107.4	104.8	102.6	105.4	N.A.	N.A.
Coated Printing Paper #3	09130113	100.0	101.7	110.6	115.6	115.3	116.9	124.2	129.9
Coated Printing Paper #5	09130115	100.0	96.7	112.1	122.4	116.1	108.3	125.6	129.6
Newsprint Class	09130291	100.0	95.9	102.3	105.3	103.3	112.3	127.6	122.5
Packaging and Industrial Converting	091303	100.0	99.4	105.4	104.3	106.9	116.0	125.7	134.5
Wrapping Paper	09130302	100.0	100.6	105.9	106.6	107.0	109.2	116.0	124.7
Shipping Sack, Unbleached Kraft	09130304	100.0	105.9	112.5	102.4	102.6	118.0	131.3	143.5
Other Converting, 18 lb & Over, Unbleached Kraft	09130311	100.0	98.0	105.2	102.3	102.7	117.9	132.2	142.8
Other Converting, 18 lb. & Over, Exc. Unbleached Kraft	09130312	100.0	99.0	103.4	103.2	104.3	109.9	114.0	122.3
Grocery Sack, Unbleached Kraft	09130307	100.0	96.8	109.1	104.8	108.5	126.0	137.7	148.2
Special Industrial Paper	091304	100.0	98.7	105.8	103.7	105.5	108.2	118.3	132.7
Paperboard Sub-Group	0914	100.0	98.4	110.4	107.7	106.6	118.1	133.2	140.1
Corrugated Paperboard in Sheet & Rolls	09140551	100.0	97.2	107.7	109.1	104.6	117.9	130.6	134.3
Paperboard, Exc. Corrugated	091411	N.A.	103.1	115.8	112.5	111.7	123.7	139.6	147.1
Unbleached Linerboard	09141101	N.A.	105.0	122.4	116.5	116.3	135.3	161.3	165.3
Other Unbleached Kraft Packaging & Ind. Conv.	09141102	N.A.	100.8	110.9	114.5	109.6	115.4	N.A.	N.A.
Bleached Pckg. & Indus. Conv. Paperboard	09141103	N.A.	100.6	107.7	108.1	106.9	107.4	113.3	131.5
Semichemical Paperboard	*09141104	N.A.	103.6	121.3	112.7	110.0	133.2	150.1	151.9
Recycled Paperboard	09141105	N.A.	101.7	109.2	108.5	107.7	114.3	124.1	129.0
Converted Products Sub-Group	0915	100.0	100.4	106.4	108.9	109.4	114.7	123.0	131.7
Sanitary Paper, etc.	091501	100.0	102.1	103.4	106.6	108.1	109.0	115.0	126.0
Paper Bags, Shipping Sacks	091502	100.0	99.0	110.5	111.9	116.9	126.0	141.1	154.0
Boxes, Shipping Sacks	091503	100.0	99.5	105.7	106.8	107.8	115.4	123.5	129.9
Gummed Sealing Tape	09150431	100.0	99.0	101.9	103.6	104.2	107.9	114.1	120.4
Office Supplies	091506	100.0	101.2	107.5	106.3	106.1	108.3	114.9	121.6
Composite Cans	091507	100.0	106.5	110.7	114.7	115.1	117.1	123.5	133.9
Pressure Sensitive Products	0916	N.A.	101.2	105.1	107.1	108.2	109.4	115.0	121.4
Building Paper and Board Sub-Group	092	100.0	104.4	106.2	107.4	106.8	111.2	118.3	115.6
Publications, Pr.Matter & Prtg.	093	100.0	106.3	112.7	118.7	123.3	128.1	134.7	142.1
All Commodities		100.0	101.3	103.7	103.2	100.2	102.8	106.9	112.2
Industrial Commodities		100.0	101.1	103.3	103.7	100.0	102.6	106.3	111.6

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.
N.A. - Not Available * December 1986 = 100

TABLE XXIXB

PRODUCERS PRICE INDEXES

FOR THE NET OUTPUT OF SELECTED INDUSTRIES AND PRODUCTS

PAPER AND ALLIED PRODUCTS

1984 – 1989

		Product Codes	Index Base	1984	1985	1986	1987	1988	1989	
Paper and Allied Products	26		12/84	100.0	98.8	99.5	104.8	113.7	120.8	
Pulp Mills	2611		12/82	112.0	100.9	103.1	117.0	114.6	161.3	
Primary products		2611–P	12/82	114.1	99.8	103.9	122.0	N.A.	169.4	
Special Alpha and Dissolving Woodpulp		2611–1	12/82	100.6	99.8	99.2	101.6	114.9	136.6	
Other Pulp, Including Pulpmill Byproducts, Except Tall Oil		2611–2	12/82	120.9	99.9	106.2	132.2	163.9	187.0	
Woodpulp		2611–21	12/82	120.4	97.9	105.4	133.3	167.0	191.6	
Bleached Sulfate Woodpulp, Softwood		*2611–21341	12/82	120.0	97.1	106.0	134.4	167.6	197.3	
Bleached Sulfate Woodpulp, Hardwood		*2611–21342	12/82	125.3	104.8	109.0	129.2	166.0	185.7	
Paper Mill Products Except Building Paper	2621		6/81	110.0	109.5	110.4	115.7	127.6	134.6	
Primary products		2621–P	6/81	110.3	109.9	110.9	161.1	N.A.	134.6	
Tissue Paper Stock and Other Machine Creped Paper Stock		2621–A	6/81	110.4	112.4	115.2	119.0	126.2	135.5	
Sanitary Paper Stock		*2621–A4	6/81	110.4	112.1	114.4	117.8	124.8	134.1	
Newsprint		2621–1	6/81	107.0	110.1	108.0	117.4	133.0	127.7	
Groundwood Paper, Uncoated		2621–2	6/81	106.9	108.3	108.7	113.0	120.0	124.6	
Publication and Printing		2621–211	6/81	106.2	107.6	108.1	112.7	120.7	124.3	
Clay Coated Printing and Converting Paper		2621–3	6/81	117.1	123.8	121.3	121.0	133.6	138.9	
Coated Two Sides, Exc Prime–C'td Body Stock for Further C'tng		*2621–36	6/81	116.5	123.5	120.9	119.9	132.5	137.5	
No. 3 Grade		*2621–363	6/81	117.2	122.6	122.7	123.9	131.7	137.6	
No. 5 Grade		*2621–365	6/81	113.5	123.9	117.6	109.6	127.2	131.2	
Other Grades		*2621–366	6/81	117.3	123.5	121.7	122.4	131.8	137.5	
Book Paper, Uncoated Free Sheet		2621–4	6/81	107.4	100.6	102.1	106.2	123.0	131.6	
Writing, Chemical Woodpulp		2621–421	6/81	106.3	98.1	99.5	105.7	121.6	130.4	
Unwatermarked Bond, No. 4 Grade		2621–42111	6/81	106.2	104.3	104.5	106.0	119.8	130.9	
Other Bond, Except Form Bond		2621–42133	6/81	109.9	108.3	110.1	113.4	N.A.	N.A.	
Form Bond, 15 Pound		2621–42155	6/81	106.7	92.8	92.6	101.2	116.2	120.3	
Other Form Bond		*2621–42159	6/81	110.5	96.6	99.6	108.1	126.5	130.1	
Other Chemical Woodpulp Writing Paper		2621–4217	6/81	106.5	95.8	98.7	105.0	124.0	134.5	
Publication and Printing		2621–441	6/81	107.7	102.2	103.3	108.7	119.9	127.7	
Offset		2621–44122	6/81	108.2	102.9	104.1	107.8	121.3	128.6	
Other Book Printing		2621–44133	6/81	107.1	101.4	102.5	107.6	N.A.	N.A.	
Cover and Text		2621–465	6/81	117.5	118.6	122.2	129.8	138.6	146.8	
Cotton Fiber Paper and Thin Paper		2621–6	6/81	115.3	117.6	121.3	126.8	N.A.	N.A.	
Writing, Cotton Fiber Including Cotton Fiber Index		2621–611	6/81	119.6	121.1	124.5	135.3	N.A.	N.A.	
Thin Paper		2621–671	6/81	113.3	116.1	119.9	125.9	N.A.	N.A.	
Packaging and Industrial Converting Paper, Unbleached Kraft		2621–7	6/81	105.0	100.2	102.1	118.4	129.9	141.0	
Shipping Sack		2621–731	6/81	107.3	97.7	97.9	112.6	125.3	136.9	
Bag and Sack, Other Than Shipping Sack		2621–751	6/81	100.2	96.3	97.9	115.7	126.5	136.2	
Other Converting, 18 pounds and Over		2621–761	6/81	105.0	102.0	102.4	117.7	131.9	142.5	
Packaging and Industrial Converting Paper, Except Unbl., Kraft		2621–8	6/81	110.2	111.1	115.6	121.5	128.1	135.4	
Wrapping		2621–811	6/81	111.1	111.9	112.3	114.6	121.7	130.9	
Bag and Sack, Other Than Shipping Sack		2621–851	6/81	107.7	109.2	110.2	113.7	125.7	132.6	
Other Converting, 18 pounds and Over		2621–861	6/81	104.2	104.0	105.1	110.8	115.0	123.3	
Glassine, Greaseproof, and Vegetable Parchment		2621–881	6/81	114.8	115.2	127.0	135.5	142.6	147.2	
Special Industrial Paper		2621–9	6/81	110.3	108.1	109.9	112.8	123.3	138.3	
Paperboard Mills	2631		12/82	116.3	112.0	113.1	126.5	141.7	149.9	
Primary Products		2631–P	12/82	115.2	112.2	111.3	123.1	N.A.	146.2	
Unbleached Kraft Packaging and Industrial Converting Paperboard		2631–1	12/82	121.2	116.3	115.6	133.4	157.3	162.0	
Unbleached Linerboard		2631–111	12/82	122.4	116.5	116.3	135.2	161.3	165.3	
42 Pound Kraft Linerboard		2631–11101	12/82	122.6	119.9	117.9	138.3	159.8	163.8	
Other Unbleached Linerboard		2631–11102	12/82	122.2	114.6	115.4	133.5	162.1	166.0	
Bleached Packaging and Industrial Converting Paperboard		2631–2	12/82	107.7	108.1	106.9	107.4	113.3	131.5	
Linerboard		2631–211	12/82	117.4	111.4	111.7	116.8	N.A.	134.1	
Folding Carton–Type Board		2631–241	12/82	107.5	105.9	104.1	105.5	111.6	128.2	
Other Solid Bleached Board		2631–284	12/82	113.1	113.5	113.6	119.6	121.7	107.2	**
Corrugating Medium (Semichemical)		2631–321	12/82	121.4	112.7	110.0	133.2	150.1	151.9	
Recycled Paperboard		2631–4	12/82	109.2	108.5	107.7	114.3	124.1	129.0	
Linerboard (Less Than 80% Virgin Fiber)		2631–411	12/82	117.4	110.6	107.1	125.6	141.1	143.6	
Corrugating Medium (Less Than 75% Virgin Fiber)		2631–421	12/82	126.2	121.8	119.4	136.8	153.6	N.A.	
Container Chip and Filler Board		2631–431	12/82	113.3	108.9	108.7	117.8	128.1	130.7	
Folding Carton: Unlined Chipboard		2631–443	12/82	111.7	N.A.	110.7	111.5	N.A.	121.1	
Folding Carton: White Lined		2631–445	12/82	N.A.	107.9	106.7	106.7	116.2	120.6	
Folding Carton: Clay–Coated		2631–446	12/82	99.3	98.6	98.1	99.4	104.9	114.7	
Tube, Can and Drum Paperboard		2631–481	12/82	111.9	112.8	112.9	116.6	122.2	100.9	#
Other Recycled Paperboard		2631–487	12/82	104.7	105.5	106.2	112.4	126.4	#	
Secondary Products		2631–S	12/82	122.0	111.1	121.7	141.9	N.A.	136.6	
Converted Paper and Paperboard Products, Except Containers & Boxes	264		12/84	100.0	100.3	101.8	104.9	112.0	120.2	
Paperboard Containers and Boxes	265		12/84	100.0	98.4	97.3	104.2	111.7	117.2	

SOURCE: Annual Supplement to Producer Prices and Price Indexes, Table 3, Bureau of Labor Statistics, U. S. Deparment of Labor, Washington, D.C.

N.A. – Not Available * – Codes changed to 1988 categories

** – Combined to 2631–28 in 1989 to index base Dec. 1988 # – Combined to 2631–48 in 1989 to index base Dec. 1988

TABLE XXX

GENERAL STATISTICS FOR THE PAPER AND ALLIED PRODUCTS INDUSTRY

1967

CODE	INDUSTRY GROUP & INDUSTRY	All Employees		Production Workers			Value Added by Manufacture ($ Mil)	Cost of Materials ($ Mil)	Value of Industry Shipments ($ Mil)	New Capital Expenditures ($ Mil)
		Number (000)	Payroll ($ Mil.)	Number (000)	Man-Hours ($ Mil.)	Wages ($ Mil)				
26	PAPER AND ALLIED PRODUCTS	610.9	16,821.0	465.7	975.0	11,758.7	49,725.8	58,788.4	108,249.7	5,905.1
2611	Pulp Mills	14.2	536.5	11.1	24.1	397.5	2,245.5	1,955.4	4,214.9	358.5
2621	Paper Mills, exc. Bldg. Paper	129.3	4,589.3	99.3	210.9	3,396.0	13,694.4	15,169.6	28,901.3	2,762.9
2631	Paperboard Mills	53.6	1,895.9	41.1	90.7	1,406.0	7,001.7	6,960.2	13,957.3	794.9
265	Paperboard Containers and Boxes	193.5	4,615.9	147.3	304.4	3,053.1	9,814.7	16,116.7	25,827.8	825.8
2652	Setup Paperboard Boxes	8.6	130.6	7.2	13.8	88.1	235.3	202.1	435.3	10.3
2653	Corrugated, and Solid fiber Boxes	108.2	2,614.9	77.5	161.0	1,841.9	5,488.4	10,690.4	16,114.7	468.8
2655	Fiber Cans,Drums,Similar Prod.	12.5	279.2	10.1	20.6	203.7	625.2	897.1	15,222.4	71.0
2656	Sanitary Food Containers	15.7	337.6	12.7	25.5	251.0	884.3	1,190.6	2,064.0	95.3
2657	Folding Paperboard Boxes	50.5	1,253.5	39.8	83.5	868.5	2,581.5	3,136.6	5,691.5	180.4
267	Misc.Converted Paper Products	220.3	5,183.4	166.9	344.9	3,506.1	16,966.5	18,566.4	35,348.4	1,163.0
2671	Paper Coated and Laminated,Pkg	15.2	412.2	10.6	22.6	256.9	1,006.4	1,450.5	2,433.1	129.3
2672	Paper Coated and laminated,n.e.c	26.9	722.9	18.5	39.3	433.9	2,312.3	2,605.8	4,904.3	166.5
2673	Bags:Plastics,Laminated & Coate	37.1	796.6	29.4	61.0	549.9	2,241.5	2,454.9	4,687.1	199.6
2674	Bags:Uncoated Paper & Multiwall	17.1	346.4	14.3	29.0	263.9	869.0	1,585.1	2,436.8	45.7
2675	Die-cut Paper & Board	15.5	304.2	12.3	24.7	201.8	665.0	1,082.4	1,740.3	29.4
2676	Sanitary Paper Products	38.1	1,144.6	29.6	61.9	852.1	6,272.1	5,441.5	11,602.0	429.4
2677	Envelopes	26.0	616.1	21.2	44.1	409.3	1,204.6	1,417.6	2,623.3	61.9
2678	Stationery Products	11.5	211.4	8.6	16.6	138.4	530.3	694.7	1,229.3	25.4
2679	Converted Paper Products,n.e.c.	30.8	628.3	22.4	45.5	397.7	1,867.2	1,833.9	3,690.2	75.9

1982

CODE	INDUSTRY GROUP & INDUSTRY	All Employees		Production Workers			Value Added by Manufacture ($ Mil)	Cost of Materials ($ Mil)	Value of Industry Shipments ($ Mil)	New Capital Expenditures ($ Mil)
		Number (000)	Payroll ($ Mil.)	Number (000)	Man-Hours ($ Mil.)	Wages ($ Mil)				
26	PAPER AND ALLIED PRODUCTS	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2611	Pulp Mills	16.7	487.5	12.8	24.8	344.1	1,113.8	1,966.5	3,110.4	658.6
2621	Paper Mills, exc. Bldg. Paper	129.0	3,403.6	100.1	208.4	2,563.6	8,954.1	12,136.7	20,994.6	1,856.1
2631	Paperboard Mills	55.6	1,501.5	43.0	88.5	1,117.7	3,739.8	5,842.3	9,531.1	1,206.7
265	Paperboard Containers and Boxes	187.5	3,516.7	140.7	276.2	2,294.3	7,395.6	11,791.9	19,192.3	496.1
2652	Setup Paperboard Boxes	10.6	154.7	8.9	16.7	91.3	250.2	184.5	433.2	10.0
2653	Corrugated, and Solid fiber Boxes	94.4	1,861.8	67.4	132.0	1,147.9	3,659.0	6,883.1	10,558.1	263.5
2655	Fiber Cans,Drums,Similar Prod.	14.1	252.5	11.4	22.1	184.3	574.5	897.9	1,473.8	31.1
2656	Sanitary Food Containers	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2657	Folding Paperboard Boxes	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
267	Misc.Converted Paper Products	213.3	3,980.6	161.7	319.4	2,685.9	12,014.1	14,658.3	26,700.7	766.2
2671	Paper Coated and Laminated,Pkg	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2672	Paper Coated and laminated,n.e.c	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2673	Bags:Plastics,Laminated & Coate	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2674	Bags:Uncoated Paper & Multiwall	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2675	Die-cut Paper & Board	15.9	245.9	12.6	23.7	168.6	706.7	975.4	1,680.1	32.7
2676	Sanitary Paper Products	36.7	863.3	28.6	59.0	641.3	4,341.0	4,736.6	9,066.0	271.1
2677	Envelopes	24.4	428.7	19.0	37.0	287.5	853.6	918.9	1,771.3	45.1
2678	Stationery Products	12.6	193.1	9.5	18.3	127.1	433.1	600.7	1,034.0	21.4
2679	Converted Paper Products,n.e.c.	30.4	496.9	22.3	43.7	314.4	1,261.3	1,336.0	2,637.7	74.9

SECTION V

SUPPLEMENT

Tables XXXI and XXXII present data on production, imports, exports and new supply of wet machine board and total construction paper and board, for the years 1947 through 1989. The production data for 1982-1989 are API estimates; the other data are drawn from Bureau of the Census reports. The 1988 production data for construction paper and board have been revised downward based on information collected as part of the API's Capacity Survey.

These data are included in the production and new supply totals shown in Table I and VIII. API does not collect monthly data on these grades.

Table XXXIII shows the data on imports used in computing the new supply totals presented in Table VIII. They reflect a more accurate appraisal of the newsprint and uncoated groundwood paper imports than those published by the Census. The Census data are presented in Table XI.

Table XXXIV presents similar data on exports. The paperboard export totals used for the years starting with 1968 are those reported by API's Paperboard Group and Containerboard and Kraft Paper Group as production for export. The Census data are presented in Table XII.

This section also includes the index to this report.

TABLE XXXI

WET MACHINE BOARD PRODUCTION, IMPORTS, EXPORTS AND CONSUMPTION

CENSUS DATA

1947 - 1989

(In Tons of 2,000 Pounds)

YEAR	Production	Imports	Exports	New Supply
1947	148,800	-	-	150,000
1948	142,134	-	-	142,000
1949	129,761	1,240	2,615	128,386
1950	164,611	2,136	3,266	163,481
1951	150,559	3,144	3,876	149,827
1952	140,175	2,242	3,318	139,099
1953	156,496	2,872	3,698	155,670
1954	135,910	3,349	3,420	135,839
1955	178,687	4,211	3,727	179,171
1956	146,589	3,492	3,998	146,083
1957	137,998	3,289	4,188	137,099
1958	121,103	4,566	3,884	121,785
1959	144,807	5,214	3,566	146,455
1960	174,992	4,517	2,791	176,718
1961	155,205	3,668	3,516	155,357
1962	145,625	4,905	5,312	145,218
1963	140,669	2,925	4,412	139,182
1964	147,880	10,403	4,884	153,399
1965	143,872	10,306	4,139	150,039
1966	148,098	5,537	4,811	148,824
1967	143,984	8,636	5,218	147,402
1968	154,794	11,146	4,318	161,622
1969	147,671	9,073	3,842	152,902
1970	139,055	9,308	4,614	143,749
1971	137,825	6,198	4,383	139,640
1972	147,914	4,204	5,642	146,476
1973	148,892	6,883	7,495	148,280
1974	143,862	5,899	11,287	138,474
1975	115,169	3,814	6,136	112,847
1976	129,955	6,988	6,617	130,326
1977	128,627	3,608	8,051	124,184
1978	136,337	2,614	7,554	131,397
1979	144,059	2,345	7,371	139,033
1980	137,649	2,118	8,017	131,750
1981	160,293	1,684	10,812	151,165
1982	129,000 E	1,842	11,089	120,000 E
1983	140,000 E	3,584	11,624	132,000 E
1984	140,000 E	2,826	13,782	129,000 E
1985	130,000 E	3,270	13,380	120,000 E
1986	130,000 E	3,235	18,893	114,000 E
1987	120,000 E	3,463	17,328	106,000 E
1988	100,000 E, R	4,239	11,691	93,000 E, R
1989	100,000 E	606	2,889	98,000 E

Source: Production - Department of Commerce, Bureau of the Census, Industry Division.
Current Industrial Reports: Pulp, Paper and Board, Annual Issues
Imports and Exports: Foreign Trade Division, Department of Commerce
E - Estimated by American Paper Institute R - Revised

TABLE XXXII

CONSTRUCTION PAPER AND BOARD PRODUCTION, IMPORTS, EXPORTS AND CONSUMPTION

CENSUS DATA

1947 - 1989

(In Tons of 2,000 Pounds)

YEAR	Production	Imports	Exports	New Supply
1947	2,047,763	32,923	35,406	2,045,280
1948	2,227,217	30,695	23,277	2,234,635
1949	1,773,573	22,541	28,090	1,768,024
1950	2,263,617	30,677	24,019	2,270,275
1951	2,303,538	29,057	30,223	2,302,372
1952	2,197,763	27,545	24,343	2,200,965
1953	2,322,275	26,177	25,871	2,322,581
1954	2,436,002	21,228	28,355	2,428,875
1955	2,698,344	28,944	30,580	2,696,708
1956	2,530,407	29,429	33,650	2,526,186
1957	2,317,701	19,040	31,800	2,304,941
1958	2,446,375	23,073	25,613	2,433,825
1959	2,605,831	27,698	28,250	2,606,279
1960	2,507,763	18,090	28,137	2,497,716
1961	2,474,304	11,168	31,430	2,454,042
1962	2,508,987	16,076	27,187	2,497,876
1963	2,591,639	28,851	26,304	2,594,186
1964	2,747,582	44,359	28,539	2,763,402
1965	2,822,203	29,471	29,463	2,822,211
1966	2,649,808	25,945	33,720	2,642,033
1967	2,679,398	26,591	26,539	2,679,150
1968	2,906,986	28,856	33,957	2,911,885
1969	2,955,112	39,362	42,837	2,951,637
1970	2,812,345	48,875	32,843	2,828,377
1971	3,282,908	81,262	37,673	3,326,497
1972	3,444,014	104,385	44,335	3,504,064
1973	3,404,880	105,558	54,385	3,456,053
1974	3,140,084	88,701	66,242	3,162,543
1975	2,864,353	84,363	59,575	2,889,141
1976	3,205,761	93,155	62,006	3,236,910
1977	3,255,141	135,274	50,270	3,340,145
1978	3,339,792	329,594	63,850	3,605,536
1979	3,130,601	382,883	54,642	3,458,842
1980	2,420,112	473,679	57,662	2,836,129
1981	1,989,203	396,496	68,832	2,316,867
1982	1,533,000 E	419,515	47,833	1,905,000 E
1983	1,660,000 E	473,667	55,746	2,078,000 E
1984	1,660,000 E	496,830	63,890	2,093,000 E
1985	1,570,000 E	413,196	55,429	1,927,800 E
1986	1,470,000 E	336,409	75,149	1,731,000 E
1987	1,470,000 E	305,985	90,024	1,686,000 E
1988	1,470,000 E	318,206	120,185	1,668,000 E
1989	1,470,000 E	189,119	33,388	1,626,000 E

Source: Production - Department of Commerce, Bureau of the Census, Industry Division.
Current Industrial Reports: Pulp, Paper and Board, Annual Issues
Imports and Exports: Foreign Trade Division, Department of Commerce
E - Estimated by American Paper Institute

TABLE XXXIII

IMPORTS

1960 - 1989

(000 Tons)

YEAR	Newsprint	Uncoated Groundwood Papers	Coated Papers	Uncoated Free Sheet Papers	Thin Papers	Bleached Bristols	Total Printing/ Writing
1960	5,426	39.5	0	1.8	3	0.5	44.8
1961	5,382	35.9	0	3.4	3	0.5	42.8
1962	5,415	41.5	0	3.8	3	0.4	48.7
1963	5,398	77.2	0	5.3	3	0.5	53.0
1964	5,908	70.6	0	11.2	7	0.5	89.3
1965	6,349	98.1	0.9	10.7	9	0.4	1,198.0
1966	6,884	132.9	0.9	14.2	11	0.3	159.3
1967	6,546	147.5	1.4	34.7	13	0.5	197.1
1968	6,391	136.8	1.3	13.4	12	0.3	163.8
1969	6,724	216.9	3.3	15.4	10	0.4	246.0
1970	6,477	232.9	3.5	48.9	8	0.4	293.7
1971	6,463	244.2	4.7	108.5	7	0.5	364.9
1972	6,758	225.1	4.5	93.3	6	0.5	329.4
1973	7,236	237.1	12.3	120.2	15	1.0	385.6
1974	7,452	321.3	16.3	138.9	18	3.5	498.0
1975	5,522	264.0	4.7	86.9	9	0.7	374.3
1976	6,308	338.1	15.5	133.9	12	0.6	500.1
1977	6,339	443.2	111.6	155.3	13	17.0 #	740.1
1978	7,102	610.7	213.7	112.7	7.3	15.9	959.7
1979	7,168	694.5	188.7	141.7	14.9	16.2	1,053.8
1980	6,880	688.1	114.8	119.0	6.3	14.2	941.3
1981	6,725	650.0	39.0	119.5	12.0	7.9	827.5
1982	6,202	665.1	69.1	157.0	11.3	14.6	917.1
1983	6,651	991.8	162.4	222.8	20.3	19.7	1,417.0
1984	7,378	1,393.4	428.4	459.0	46.4	24.1	2,351.3
1985	7,635	1,475.7	496.2	379.3	23.7	22.5	2,397.4
1986	7,686	1,595.1	501.2	476.2	45.4	28.3	2,646.2
1987	8,189	1,753.2	674.4	433.0	47.6	28.0	2,936.2
1988	8,007	1,911.8	797.7	616.1	55.8	51.5	3,432.9
1989	7,664	1,873.3	774.0	583.0	12.7	59.1	3,302.1

SOURCE: Newsprint - Canadian Shipments to U.S., CPPA; Other Country Imports to U.S., U.S. Bureau of Census
Uncoated Groundwood - Imports from Canada, CPPA
Imports from other countries, Bureau of the Census, adjusted by Printing/Writing Division of API
Uncoated Free Sheet Papers - Bureau of the Census, adjusted by Printing/Writing Division of API
Coated Papers - Bureau of the Census

NOTE: Imports used to compute new supply for Table X. # Series revised to include cut size paper.

TABLE XXXIV

EXPORTS

1960 - 1989

(000 Tons)

YEAR	Uncoated Groundwood Papers	Coated Papers	Uncoated Free Sheet Papers	Thin* Papers	Cotton Fiber Papers	Bleached Bristols	Total Printing/ Writing	Unbleached Kraft Paperboard	Semichem. Paperboard	Bleached Paperboard	Recycled Paperboard
1960	8.6	26.1	38.2	15.0		0.8	88.7	381.0	31.0	23.0	46.0
1961	10.2	21.7	34.6	15.0		0.9	82.4	407.0	62.0	32.0	60.0
1962	9.1	24.3	31.3	15.0		1.3	81.0	445.0	44.0	33.0	55.0
1963	11.1	27.1	30.1	14.0		1.7	84.0	517.0	83.0	39.0	53.0
1964	13.1	36.6	34.4	16.0		1.9	102.0	765.0	107.0	45.0	71.0
1965	3.2	48.5	29.0	29.0		0.0	109.7	905.0	55.0	47.0	32.0
1966	3.8	49.6	30.6	32.0		0.0	116.0	1,016.0	64.0	59.0	27.0
1967	4.4	46.8	27.3	31.0		0.0	109.5	1,174.0	76.0	61.0	23.0
1968	7.9	57.1	31.9	47.0		0.0	143.9	1,380.7	94.0	108.5	12.9
1969	6.1	70.0	35.3	56.0		0.0	167.4	1,682.8	52.4	108.1	16.8
1970	7.3	75.2	41.3	58.0		0.0	181.8	1,683.4	84.3	114.4	17.3
1971	9.9	72.2	46.2	74.0		0.0	202.3	1,834.3	104.0	156.5	20.6
1972	17.6	76.2	50.6	68.0		0.0	212.4	1,887.5	111.7	217.8	14.4
1973	29.7	80.6	65.0	87.0		0.0	262.3	1,596.7	107.4	280.3	30.8
1974	53.3	98.8	100.4	106.0		0.0	358.5	1,582.7	145.5	320.2	101.0
1975	74.7	122.8	1,219.8	80.0		0.0	397.3	1,058.0	115.4	256.2	23.9
1976	70.6	106.7	147.3	102.0		0.0	426.6	1,247.3	119.3	306.1	36.5
1977	54.1	98.9	111.4	76.0		0.0	340.4	1,289.6	121.9	389.4	29.6
1978	58.1	73.7	84.9	26.5	12.2	10.7	266.4	1,466.3	119.2	432.9	21.6
1979	80.4	73.5	68.1	32.4	10.9	9.2	274.2	1,645.3	98.2	496.7	21.8
1980	101.0	92.8	88.3	33.8	16.6	8.6	341.3	2,379.8	322.3	549.4	82.6
1981	119.7	88.6	116.7	42.7	9.2	6.4	383.3	1,886.6	155.2	556.6	23.8
1982	55.9	81.4	70.6	27.7	6.6	4.4	246.6	1,931.4	184.9	524.7	12.7
1983	37.5	79.2	59.3	17.6	4.8	3.7	202.1	2,280.7	192.6	514.5	24.3
1984	30.2	85.6	65.5	14.0	5.0	3.0	203.3	2,086.4	149.2	478.3	17.4
1985	36.7	82.5	64.4	13.3	4.3	1.4	202.6	1,830.0	189.4	465.6	26.3
1986	40.9	78.0	50.0	14.5	4.5	2.4	190.3	2,236.6	212.5	568.7	70.2
1987	55.8	100.8	67.9	18.4	4.1	2.1	249.1	3,202.8	192.5	618.9	75.5
1988	70.0	97.5	82.7	28.1	6.0	2.6	286.9	2,295.7	136.3	627.7	72.0
1989	88.1	168.5	121.7	52.6	0.7	46.7	478.2	2,363.0	137.6	693.4	38.0

SOURCE: Paper Grades - Bureau of the Census; Printing/Writing Paper Division compilation
Paperboard Grades - 1960-1967 - Bureau of the Census
1968-1989 - American Paper Institute (See Table VII)

NOTE: Exports used to compute new supply for Table X. R - Revised * - Includes Cotton Fiber Papers, 1960-1977.

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(See Bleached Kraft Paperboard & Unbleached Kraft Paperboard)

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